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OBJECTS IN USE

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Material Spatiality in Late Antiquity

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MATERIAL SPATIALITY IN LATE ANTIQUITY: SOURCES, APPROACHES AND FIELD METHODS

Luke Lavan, Ellen Swift and Toon Putzeys

Introduction

The aim of this book is to encourage the study of material spatiality in Late Antiquity. More precisely it wishes to promote the reconstruction of the spatial configurations of artefacts in different functional settings ('church', 'house', 'shop', etc.), in both storage positions and in patterns of use. As such, it explores the material manifestation of everyday life in Late Antiquity. The volume especially wants to shift the focus of the study of archaeology of the late antique period from the architectural remains towards the spatial distribution of artefacts and the activity patterns they represent. This movement, away from architecture towards objects and behaviour, makes for a much richer understanding of topography, in which our perspective on the material world seeks to become that of people living in Late Antiquity rather than that of an architect or urban planner. The topic requires one to put excavated archaeological remains back together into the contexts from which they came, rather than consider them in isolation, or as individual categories, such as pottery. It also involves the careful examination of textual and pictorial evidence, to try to consider the use of objects and the function of spaces, many of which may have left no trace in the archaeological record.

This kind of spatial analysis is well-established in anthropology or in the archaeologies of earlier periods, for obvious reasons: in prehistory or in the Early Medieval period artefactual remains of activities may be more visible than architectural remains, whilst the spatial arrangement of artefacts may reveal more about their function than the indistinct form and material of the objects themselves.[1] However, in studies of Late Antiquity, as in other classical periods, there has been a tendency to see

[1] See, especially, Hietala (1985); Hodder and Orton (1976); Kroll and Douglas Price (1991); Kintigh (1990); Binford (1973); Binford (1978).

L. Lavan, E. Swift, and T. Putzeys (edd.) *Objects in Context, Objects in Use* (Late Antique Archaeology 5 – 2007) (Leiden 2007), pp. 1–42

architecture as providing a guide to the functions of built spaces.[2] The accounts of classical authors have been used to assign names to spaces and to determine the organisation of activities; this textual nomenclature was readily taken over by archaeologists, who used it uncritically to identify and interpret their material.[3] By sticking a few architectural labels on buildings one can at least make a city feel human. But this is a poor guide to the past, when occupation deposits, waste, graffiti and even descriptions of the daily routine are available. One runs the risk of privileging the hopes of architects over the lives of people who actually lived in these structures. Especially in the case of Late Antiquity, the effective use of a space could have been completely different from its intended function. Houses and other buildings had been in use for decades—even for centuries—and the subsequent occupants used the existing environment according to their own needs and practices. Accordingly, architecture can only present the raw setting in which human activity took place, without representing the living conditions of the inhabitants. In this regard, it is extremely important that a serious study of material spatiality is established for Late Antiquity, in which all available sources contribute to our understanding of how buildings and objects were used.

Although there have been pioneers in late antique archaeology (Sardis, Anemurion),[4] the immediate inspiration for such a development comes from archaeological work in the early Roman period: Crummy on functional categories of small finds,[5] Cool on correspondence analysis of contextual material,[6] Allison on spatial analysis at Pompeii[7] and more recently Xanten.[8] Recent trends within patristics towards analysing hagiography and sermons for everyday details have also contributed to rising interest, so that the time seems ripe to consider also what these sources might tell us about the material spatiality of Late Antiquity.[9]

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[2] Lavan (2003a).

[3] Ault and Nevett (1999) 43. On the problem of using textual nomenclature for the identification of architecture and artefacts, see Allison (2001) 185–88; (1999a) 322–23; (1999b).

[4] *Sardis*: Crawford (1990), *Anemurion*: Russell (1982).

[5] Crummy (1983).

[6] Cool, Lloyd-Morgan and Hooley (1995); Cool and Baxter (1995); (2002).

[7] Allison (1999a); (2004).

[8] Allison, Fairbairn, Ellis and Blackall (2004); Allison (2006).

[9] Such as Mayer (1993).

As will become clear, there are many things that one might wish to do with a well-documented spatiality of everyday life in Late Antiquity. There is the potential for the functional study of individual artefacts as well as a study of the social construction of human space. Such approaches are well-established in periods where spatial studies of artefacts are *de rigeur*. But they are currently a bit of a pipe-dream for Late Antiquity. To date, there exists very little published work on artefact spatiality, beyond perhaps the use of liturgical objects in churches and of dining vessels. The basic work on assembling corpuses of material has not been done, and even analyses of rich occupation deposits are few and far between. This is not for lack of potential evidence, as we hope the papers describing East Mediterranean earthquake levels make clear (see Walmsley; Khamis; Putzeys *et al.* in this volume). Rather it reflects a failure of scholars to engage with the topic, even when excavating very rich sites. Consequently the editors have decided, here, as in the bibliographic essays, to consider the essential difficulties of the source material, in reconstructing spaces for their own sake, before exploring the potential of some more complex approaches to the subject, and looking to future fieldwork priorities.

Sources: Possibilities and Problems

If talk of 'pipe-dreams' has not yet discouraged the reader, then what follows will. "The essential difficulties of the sources" is at best a euphemism. Our sources are many and rich but each provides only a very partial light, and biases are very great, to the extent that many important activities have left no trace outside of texts or pictures, whilst for others we have only single examples of high-grade preservation across the whole empire. Thus the debate about late antique space becomes for many themes entirely interpretative. This might discourage an empirical archaeologist, but it is vital to engage in this debate. Only by understanding where and why good preservation occurs, and what cannot be found, can field method be improved and good data recovered. Without such a dialogue, involving textual scholars and art historians, as well as excavation directors, we condemn archaeologists to identify only endless production sites, shops with no clear function, and domestic abandonment deposits.

Architecture: Buildings, Fixtures and Decoration

Whilst architecture is limited in its ability to provide a basis for past spatial functions, it can still have an important role to play. A careful study of repair can often testify to the continuity of architectural function, as when a complex plan is maintained with repairs but without major alterations. Meaningful functional observations can also be made if architecture is combined with a study of fixtures and fittings, such as stone furniture. These can allow one to go beyond the theoretical organisation of space as planned in the mind of an architect, towards providing a setting for activities in which the use of artefacts can be hypothesised, with reference to other source material (see Caseau, Michel in this volume). Repairs give clues to the continuing function of structures, when complex plan elements are maintained rather than being altered over time. Decoration can also provide clues to the uses of different spaces, such as the panels left for dining couches in some *triclinia* mosaics (see Mitchell, Swift on decoration in the domestic context).

The possibilities of architectural evidence, even with fixtures and decoration, are of course limited (see, for example, Manière-Lévêque's discussion of enigmatic structures at Xanthos). Some activities tend to use less distinctive architectural frames than others: political activities require few fixtures, and can use many settings: thus law courts were held in bath buildings and stoas, as well as civil basilicas. The latter could also house commercial markets, as inscriptions associated with two new 4th c. basilicas from Cuicul in Numidia make clear.[10] In general terms, one might also say that some types of secular architecture were less distinctive in Late Antiquity than they had been earlier. This is obviously true of forts, whose internal plans tend to become rather less distinct in Late Antiquity, and also true in cases of re-use: such as when *praetoria* are built within complexes originally designed for an entirely different purpose: in such cases decoration and architecture might be functionally mismatched (see, e.g., Gardner in this volume). All these circumstances make it more difficult to 'read' activities from built space. Furthermore, preservation is highly variable. The architectural fixtures described by Michel in this volume are uncommon survivals. Such stone furniture, along with marble liturgical screens dividing up

[10] Février (1968) 56–61.

the body of a church, is rarely found *in situ*, as it is in remote rural areas of the Levant. Usually one is left only with floor traces, if one is not so unfortunate that all ornament has been comprehensively stripped; this often happens to monumental buildings where there is subsequent occupation (see Poulter, Mitchell, this volume). If only foundations survive, the interior door steps might even be missing, so that a functional plan cannot be reconstructed.

Occupation Deposits Preserved by Destruction

Undisturbed destruction levels, trapping occupation deposits, are naturally a modern archaeologist's dream. With sudden violent earthquakes, as found in the East Mediterranean, preservation can be optimal, especially if burning has occurred. Valuable objects (such as gold coins or jewellery) can be retained that would not be left at a site during normal abandonment, as well as a large number of everyday items, that if well-excavated can closely reflect human activities which took place within. Many of the papers in this volume are based on the analysis of rich deposits of this kind (e.g., Walmsely, Khamis, Poulter, Grinter, Fiema). Yet, although violent earthquakes do kill some owners and trap them together with their belongings, such undisturbed destruction layers are uncommon; survivors often go looking for valuable objects, visibly disturbing the stratigraphy. Conversely, the military sack of a city might see the victors filtering some building contents for spoils. Furthermore, such destructions have a tendency to represent a particular and not typical situation: Pompeii famously reflects a city undergoing repair after an earlier tremors,[11] whilst Dichin (see Poulter, Grinter) perhaps reflects the objects brought into and used in a settlement under siege conditions.

For all these reasons contexts with a high level of preservation should not be thought *a priori* to represent typical conditions. At Pella (Walmsley) the Umayyad domestic levels are best seen as representing a very specific time of day, of week and of year. Sadly, in order for such event contexts to be representative a great many may be needed. And, as ever, the large number of activities that leave no solid material trace must not be forgotten: from the seller of wooden objects, which have all decayed, to the notary or barber, who left few material traces

[11] Bon (1997); Allison (2004) 14–26.

in the first place, but who are nevertheless recorded in texts or inscriptions outside shops. The presence of such service professionals in late antique city centres means that even studies of well-preserved artefact assemblages will leave a very incomplete picture.

Abandonment Deposits

Sadly, most archaeologists never get the chance to excavate on rich destruction deposits such as those found in the Levant. Rather they are normally faced with excavating settlements which were gradually abandoned in the upheaval that characterised the transition to the Early Middle Ages. At such sites, the dispersal of objects found in buildings mainly reflects the abandonment or temporary reuse of the late antique sites in the very latest periods, rather than the living patterns of every day (as is clear in the case of the house and the church discussed by Poulter). People took most of their belongings with them, leaving few indications of the original use of rooms and structures, which were in many cases further disturbed by post-abandonment ('squatter') occupation.[12] Furthermore, the stone floors of Roman buildings, regularly swept over centuries, mean that few objects are found trampled into earth surfaces, as they are in earlier and later periods.

Nevertheless, denuded occupation or abandonment levels may reflect tell-tale traces of use when compared with sites containing better preserved occupation contexts with high quality evidence to interpret material. Thus access to the results of the excavations of sites with 'Pompeii type' destruction levels are of major importance in understanding the material from sites where the record is more fragmentary. In this regard, archaeologists working in the Levant have a major responsibility to make their high-quality evidence accessible, not for the sake of their own sites, but for the sake of all the others, which depend upon them in interpreting their material. If this all sounds rather gloomy, it should be noted that because Late Antiquity is frequently the last major urban period on many sites, excavated evidence for everyday life is frequently much richer than that of earlier periods, when abandonment levels in particular did not often survive the re-occupation of buildings. Thus the potential for future work on both occupation and

[12] Ellis (2000) 145.

abandonment deposits is very great, as is illustrated in this volume in papers by Baird,[13] Poulter, Putzeys *et al.*, and others.

Rubbish Deposits

Rubbish deposits refer to deliberate or accidental accumulations of waste, normally coming from domestic occupation or industrial production. Their preservation is typically achieved through burial in 'fill' layers, from building construction, or the digging of waste pits. In very late urban contexts, waste sometimes starts to accumulate in a haphazard way, in public and private spaces, in a manner comparable to prehistoric and medieval settlements (see particularly Putzeys *et al.*). As a class, rubbish deposits can be a somewhat better reflection of everyday life than abandonment levels. In many cases they directly reflect different human activities (discussed in this volume by Gardner in the context of daily life in late Roman forts). If such deposits can be linked to a specific activity area, they can provide substantial information about spatial organisation within a community. This is especially true in relation to production waste, although it should be noted that there is a natural bias towards activities which generate a lot of discard.

The formation of the waste deposits also constrains their possible use for the interpretation of human behaviour, in terms of both the choices made concerning the items that were discarded, and the manner in which rubbish was disposed. When dealing with waste deposits from domestic occupation, it is important to remember that they reflect patterns of consumption, rather than say agricultural practices. Such deposits mainly consist of broken objects from routine household activities, and leftovers from food preparation and consumption. Unlike today, all such deposits are likely to be heavily sorted for re-usable items, making functional identification complex. Pits represent an immediate local need to dispose of rubbish. But when rubbish is dumped in fill layers, there is a risk that it is far from the context which generated it, and so tells us little about the immediate area. Yet, at least fill layers are fairly easy to record: East Mediterranean diggers who fail to trowel clean soil layers may miss pits entirely, especially when they were backfilled with the same material as they are cut into.

[13] See also Baird 2006; Baird 2007.

Deliberately Buried Assemblages

Deliberately buried assemblages include graves and hoards: any occasion whereby people have decided to carefully deposit items of value into the earth. The late antique well-hoards of Modena described by Gelichi in this volume are a particularly striking example. In Late Antiquity, the shift to furnished burial practices and the greater occurrence of hoards make it possible to view precious objects which are rarely consigned to rubbish deposits, and which are usually retrieved from all but the worst destruction collapse. Both graves and hoards often provide an occasion to see functional groups of objects together: items of dress in a grave, or a set of silverware for dining or for Eucharistic celebration in a hoard, that shed light on the contents of a *triclinium* or a church. Such items might not obviously belong together on the basis of functional artefact studies alone: hoards and graves give us the chance to see different sets of objects present alongside each other.

Hoards are extremely precious contexts. At present many of the hoards useful for studies of material spatiality represent church silver. Hoards of domestic objects are rare—we have three major domestic treasures, as well as the less rich but still spectacular well-hoards described by Sauro Gelichi in this volume.[14] The occasional jeweller's hoard, reflecting a selection of professional items plus high-value material for re-use, has been found, as at Snettisham.[15] Furnished graves are of course much commoner, revealing that dress types represented in them vary over time and between regions, not only in terms of dress habits but also in relation to the treatment of the body at death.

It is well to remember that all graves and hoards represent a series of active choices. The contents of graves are determined by those engaged in burial and to some extent by the wishes of the deceased. Many of us go to the grave in our best clothes and we should expect Late Antiquity to be no different. The need to express not just the identity but also the status of the individual and their client group in funeral ritual was paramount, not just amongst barbarians, but even among urban Hellenes: Libanius suggests as much from his participation in funeral corteges in later 4th c. Antioch.[16]

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[14] Cahn and Kaufmann-Heinemann (1984); Shelton (1981); Mundell Mango (1990); Mundell Mango and Bennett (1994); Baratte, Metzger and La Niece (2002).

[15] See Johns (1997).

[16] Lib. *Or.* 34.22–23.

Hoards are affected by selection of a different kind: the need to protect the most valuable items, with those made of more mundane materials perhaps not entering the deposit at all. Conversely, hoards that come from private collections and/or illegal excavations might have been through a process of editing, whereby items were added or removed. It is possible that some hoards were deliberately deposited, as ritual acts, rather than keepsafes, thus being affected by filtering based on religious sentiment: this seems unlikely to date within Late Antiquity, but it is perhaps an influence beyond the northern frontier, e.g., the large weapon deposits found in Scandinavia.[17] Finally some hoards are simply collections for metal stock prepared for recycling: consisting of silver plate and other items cut up ready for melting down. The contents of such hoards, though reflecting 'end-use' to some degree, are usually far removed from the originally intended patterns of object use.[18] For similar reasons coin hoards are also to be excluded from consideration.

Above Ground Treasures

A related, but different source type, are collections of treasures surviving in secular or ecclesiastical contexts since antiquity. Whilst these are usually composed of artefacts of very different date, added at different periods, they occasionally contain groups of objects, in ivory or wood, that would not easily have survived above ground. Whilst several cathedral treasuries have preserved ivory diptychs as individual pieces, the treasuries of Ravenna, San Marco (Venice), and La Sainte-Chapelle probably bring us closest to aspects of Late Antiquity. At one stage the latter gave one glimpses of the treasures of the great palace, though it has now been extensively weeded of 'bad art' of the Byzantine period. At best such collections are most likely to reflect treasures of the late antique period rather than anything more, but taken together they can provide valuable information on the nature of imperial ceremonial objects that we otherwise would not have.[19]

[17] See Ilkjær and Lønstrup (1982); Ilkjær (1995).
[18] For a hoard of this type from Traprain Law see Curle (1923).
[19] Buckton (1984); Durand and Laffitte (2001).

Functional Analyses of Artefacts

Functional analysis is intrinsic to the study of artefacts, being especially associated with pottery. Both archaeological and literary evidence indicate that late Roman society, at least as far as ceramics are concerned, was a consumer society with an elaborate range of vessel types designed for the specific needs of daily life.[20] Pottery was produced on a proto-industrial scale for intended, specific functions. One can assume on very reasonable grounds that certain items belonged together in groups: either because they were manufactured in a matching style, or, more reasonably, because they fit together in technological or socio-technological groupings, each performing one part of a task which required many tools: such as amphorae, jug, mixing bowl and cup. This provides a way of studying objects that sidesteps some of the problems associated with fragmentary preservation and even poor excavation. It also allows one to explore the complementarity of objects in an active manner, noting far more than that they just 'belong together'.

But such scholarly imaginings have their limits: they give scholars the perspective of the producer rather than the consumer: an idealised view of how objects were meant to be used—if you bought the whole set—rather than how they really were used. This seems a poor argument if one is in relation to very common artefact groups (cooking ware, etc.), but it is worth bearing in mind that ancient use could be infinitely complex: the content of Gelichi's hoards raise the possibility that very old objects could be in use with new items, so greatly disrupting any idea of reality we might wish to draw from typological schemes. Sometimes repairs to older artefacts can reveal changes in function, so that their form as made coincides little with their end-use function. Furthermore, ordinary people will always have been pragmatic and will have improvised in doing different tasks: allowing objects to serve for uses that their maker had never intended. Finally, it is of course to be expected that in most regions, with the exception of little-studied Egypt,[21] we lack whole ranges of organic artefacts which are consequently omitted from studies of this type, even though they represented perhaps the majority of objects used across the empire.

[20] See, especially, Hilgers (1966).
[21] Gazda (1983).

Depictions

Pictures of everyday life and public ritual occur in Late Antiquity on mosaics, frescos, relief carvings, ivories, silver plate and gold glass, as icons or as manuscript illustrations, or images on lamps and medallions, etc. The object collections shown by such depictions do not suffer from the loss of organic items, but instead are able to reveal such perishable items as foodstuffs on tables, or valuable items that ancient salvage has removed from sites, and small but meaningful objects, which excavators might have missed. Above all, the ability to see human actors actually using objects in different tasks provides a direct frame of reference. Not only are objects used, but used together in groups, in a real single-time situation, not as part of the accumulated clutter of a large number of activities from a long period, as found on archaeological sites. This takes us very close to the everyday material spatiality of Late Antiquity that is our quest. Parani and Vroom illustrate in this volume the potential of depictions in a reconstruction of dress and of dining respectively.

But whilst such depictions can be very vivid, the total number of useful scenes is relatively small, with patterns of survival varying greatly over time and space. It is not easy to use depictions of mythological or religious subjects, even though characters may engage in some everyday behaviours, such as dining, which can be directly related to the period. This lack of quantity poses methodological problems: we are often confined to single depictions of spatial types, at best, especially as regards depictions of shops and workshops. For Late Antiquity we do not have the many depictions of urban shops found on early imperial tombs in the Rhineland or elsewhere.[22]

Not all activities were of interest to artists and patrons of the period: a preference for some scenes and not others, due to the requirements of book illustration and domestic or church decoration, means that depictions provide a selective view of the past. Furthermore, the nature of the image itself is far from being a simple reflection of past life. The iconography of images, in terms of their forms and specific content can greatly differ from real life, as has been illustrated by studies of late Saxon manuscripts by M. Carver.[23] Artistic conventions and artistic conservatism also play a role; not all objects shown might still exist in the contemporary world. Objects might be used as a kind of

[22] Zimmer (1982); Kampen (1981); Dragendorf and Krüger (1924).
[23] Carver (1986).

shorthand, to represent a particular activity—for example a dining plate to show the complete activity of the dinner. When imperial or religious themes are treated, the degree to which any pictorial depiction represents reality, rather than an iconographic construct, is especially problematic. A particular combination of, or setting for, artefacts might be used for symbolic reasons, rather than because it represented reality. The degree to which this affects depictions of everyday life is difficult to assess. Finally, the re-copying of manuscripts in the Middle Ages and Renaissance also introduces distortions: intended and unintended. Mosaics on the other hand are usually only altered by the restorations of over-eager conservators.

But despite these reservations, pictures remain a powerful source. Antiquarian conservatism is less of a problem for Late Antiquity than it is for the Early Medieval period, and it is possible to judge the level of iconographic distortion that has occurred by cross referencing what is depicted with other types of source material. It should not be forgotten that the political rituals and social codes of late Roman society lent themselves to formalised depiction, so that the difference between art and life might not be as great as one could imagine.

Texts

At first sight texts might not seem such a valuable source for material topography: they are usually focused on events and people, their feelings, opinions and emotions, not objects and object configurations in human space, except in descriptions of public ritual (law courts, liturgy, imperial ceremonial), where the use of symbols played an important role in political and religious events. However, amongst the anecdotes of sermons, orations and chronicles, a great amount of detail does emerge on everyday life, with eye-witness accounts of personal slights, important events, and ample social satire, sometimes directed at specific behaviours of the audience themselves. The lives of saints, although written by third parties, often privilege their interaction with ordinary people in everyday situations.[24] These accounts can be distorted by a myriad of genres and personal author motivations (see for e.g., Harlow's

[24] Cf. the dissertation by Zani de Ferranti Abrahamse (1967) on the period between 500 to 900 A.D. and also the current Dumbarton Oaks project for 8th to 10th c. A.D. http://www.doaks.org/Hagio.html, which is designed to allow citation searches for topics related to everyday life.

discussion of Jerome, this volume), but it is a mistake to think that all parts of a text are equally subject to 'rhetorical distortion'. Everyday details often play a role in claims to fact, or are inserted in a manner as to be incidental to the main purpose of the text. Despite their limitations, literary sources can provide descriptions of structures, objects and everyday behaviours in Antiquity, for which no or very little archaeological evidence remains. As such, textual evidence can bring the rough setting provided by archaeology back to life.[25]

The information derived from texts, whilst not as vivid as depictions, reveals to us objects (including wood, cloth and incense) actually in dynamic use: not frozen in a scene or in an archaeological context. It allows us to understand why objects were being used, in what real rather than theorised functional relationships, and by whom, and so to grasp the logic behind particular artefact arrangements (see Vroom, Parani). Above all, we are able to see the consequences for human actors of the use of objects in conventional and unconventional ways: to grasp the significance of changes in dress, for example, and what all this might mean when related to the position and comportment of the human body, itself of great importance in understanding social relations in Late Antiquity. Furthermore, many of the everyday situations described by Ammianus, Augustine, Procopius or in the more reliable lives of saints do perhaps represent something a lot closer to the norm than many of the depictions of the period, or the freak events that produced many destruction layers.

Occasionally papyri or other sources produce lists of objects found in a particular space or belonging to a particular person (see Caseau on inventories). But this is unusual. More often we cannot obtain a holistic view of the objects present in any given setting: texts naturally concentrate on those essential to the narrative, which will often be the most 'active' or valuable in an object group. As with any personal description of an event, the perception of the author is also critical: what did he or she notice, was he or she wide awake at the time, and how much of the account is based on second-hand knowledge? This seems to present an insurmountable obstacle, but the codified use of prestigious objects in displays of political and social status provides a measure of control. Late Antiquity was a very collective society less

[25] See, for example, the epilogue to Wallace-Hadrill's *Houses and Society in Pompeii and Herculaneum*; Wallace-Hadrill (1994) 173–86.

concerned with displays of individuality than our own. Thus, particular behaviours recur again and again in the sources. Yet this is of little help in dealing with economic space: our texts have very little interest in how tools were used in a production cycle: here functional artefact studies and parallels with other periods are of more use. However, there is also the possibility that texts might tell us rather more than we can see or understand from either depictions or occupation levels: not every name in a late antique text has been matched to an object, or vice versa. Scholarly interest in the potential of textual evidence has not been so great as to encourage the writing of 'object biographies', as seen in later periods.[26] One might go as far as saying that patristic and other late texts for the study of everyday life have not been exploited to anything like their full potential.

Inscriptions

Some clues on behaviour can be garnered from inscriptions and inscribed markings. Inscribed decrees can occasionally be useful, as frequently these were displayed in the place where their regulations were to be enforced.[27] Much information can also be obtained from minor inscriptions and graffiti. The 4th c. Tetrastoon at Aphrodisias is covered with such texts: acclamations for the governors, a list of prices from a market stall, and the *topos* inscriptions from the columns in front of late shops, which identify the traders within: a barber and so forth. Acclamations can be used to identify the sites of political rituals, especially if there are many concentrated together.[28] *Topos* inscriptions change their meaning according to context; they indicate reserved seating in entertainment buildings and on public seats, or alternatively indicate the points from which individuals or associations were officially permitted to trade, if the inscriptions occur in squares or streets, especially in front of shops; occasionally they suggest the sites of free-standing market stalls, as at Aphrodisias and Sagalassos.[29] It is generally accepted that such inscriptions were officially authorised by

[26] Kopytoff (1988); Ditchfield (2007).
[27] Lavan (2006) 211–12.
[28] For *topos* inscriptions see: Roueché (1989) nos. 187–211 with commentary, and for acclamations see Roueché (1984), (1999a), (1999b).
[29] E.g., Roueché (1989) nos. 195–96 plus forthcoming study of the *agorai* of Saglassos by Lavan.

civic authorities based on an inscription from Iasos (*I. Iasos* 261): their regularity and group associations in some cities suggest this is likely: but we cannot be sure if usurpation can be excluded. Game boards provide details of social life, and on patronage, if professionally cut and accompanied by dedicatory inscriptions.[30] Other doodlings occasionally reflect spatial function, though they are more frequently one of a small number of ubiquitous types.

Whilst such minor texts and pavement markings are appealing, they are rare in most parts of the late antique world. Extensive paved areas with surviving columns (popular surfaces for graffiti) are rare in many regions, where either paving slabs were uncommon for streets and squares or where post-antique spoliation has removed these eminently re-usable pieces. Markings cut into plaster predictably survive less well (though they may contain longer, more personal texts), whilst paint is even rarer, though not unknown. In most cases we should consider that the total number of markings recorded on a site represents only a fraction of what had been visible in antiquity. Dating is often problematic, though not impossible, if care is taken to note the content, letter forms and archaeological context of such texts. These markings are extremely valuable as they touch upon both the material reality of the archaeologist, and the conceptual world of the literary texts, at an everyday level, so that much information on spatial function can be obtained from them.

Combining the Sources

Given the very different strengths and weaknesses of the separate source types outlined above, it seems obvious that no single source type can provide a complete reconstruction of material space, full of objects and behaviours, as it existed in the past. Furthermore, the most common evidence (abandonment deposits, architectural plans and fixtures) is usually seriously denuded, so that a handful of sites with high quality preservation can be more significant than a hundred with poor survival. In the same way, for many spatial types we have only a single depiction or literary description. This means that any meaningful work done on reconstructing material space must, by its very nature, be interpretative: the simple empiricism of data collection, on one site or even on

[30] Bell and Roueché (forthcoming).

one theme, is clearly not enough. Archaeologists, in particular, must be aware of the fragmentary nature of their data, and (depending on the type of space being reconstructed) that they will not be able to trace a full range of commercial and socio-political functions in urban space from the data they have, even when survival is optimal. Only by fully understanding the significance of *topos* inscriptions, texts and depictions is this likely to be possible.

As no one source can claim to provide a complete account of any given space, interdisciplinarity is essential. Archaeology probably provides the best basis for studying production spaces, whilst texts cover political life and depictions best illuminate the domestic social rituals of dining and the toilet. But it would be foolish to restrict an interpretative discussion of material space to the evidence from Late Antiquity alone, even if we are focusing our reconstructive effort entirely on this period. In many areas of life, there are great continuities between the Hellenistic and Early Imperial periods and Late Antiquity. This might seem most obvious in the case of production sites, but it also applies to shops: we have far better evidence for the street appearance of shops in the first three centuries A.D., but the few depictions we have for Late Antiquity suggest some continuity of practice. This does not mean one simply transposes evidence from the early Imperial period to Late Antiquity when there is an evidential hole for the latter epoch. But it should mean that any reconstruction, especially one based on archaeological evidence from a specific well-preserved context, should keep this information, along with all other late antique sources, firmly in mind. By using such a wider framework, it may be possible to make greater sense of the evidence, and to recognise meaningful traces in data that could not previously be explained.

For some scholars such intellectual exercises will seem to be getting a long way from the evidence. All this 'interpretative evaluation' of different types of data seems very 'soft', and not at all like hard science. However such interpretative 'speculation' is essential. The data on its own is frequently of little intrinsic historical interest: do we really care about rubbish traces, or categories of abandonment deposit? We might, but the wider academic public does not. Such data only takes on significance as a testimony of behaviour if its nature and significance is evaluated through interpretation. Nevertheless, in order to make these interpretative debates meaningful they should be disciplined and explicit in their reasoning. It does not help to build functional theories based on a single site, as an after-thought to presenting the data, as

often happens: such reconstruction should refer to a full panoply of evidence, from all disciplines and a full range of sites. It is hoped that the bibliographic essays included in this volume will go some way to making this possible. Provided that scholars are explicit that they are using 'soft' and not 'hard' reasoning in reconstructing past material spaces, a great deal of progress can be made. An imaginative multivariate approach, which combines many different source types, might produce a more convincing account of the everyday life in Late Antiquity than a simple collation of the evidence, provided that we remain committed to the exploration and publication of high quality destruction sites in the East Mediterranean.

Approaches to the Subject

Firstly, and central to the approach taken in this book as a whole, evidence of material spatiality lends itself to the reconstruction of the totality of a space—including the movements of human actors and their material accessories—which must be the fundamental goal of a contextual archaeology of everyday life.[31] Many of the papers presented here show us in more detail, at closer spatial and chronological resolutions, what the physical spaces of Late Antiquity were actually like for those who used them. Following on from this, the potential for further interpretations becomes apparent; examining, for instance, the way in which a consideration of material spatiality allows us to better understand the uses and meanings of artefacts in the past; just as important, it also becomes possible to move towards an enhanced understanding of the way in which late antique surroundings, in the fullest sense of the word, articulated with behaviour. Drawing on the rich evidence provided by the particular studies in this book, we can also begin to examine changes in the spatiality of the material record through time and how an understanding of this transformation might contribute to a more nuanced view of social change in the period.

[31] See, for example, Allison (2004) 125–58 on the distribution of household activities according to context.

Visual Reconstruction of Lived Space

The topography of a space, as previously mentioned, includes the material world experience at a human level. In order to reconstruct the spatial dimension, we not only need to know where people were situated, but how they were engaged with the material world. How were people and objects situated in relation to each other? What were people using objects for within the social space?[32] Any experience of events is played out at this level, and its reconstruction will allow us to understand the actions and reactions of people in relation to the material world in which they were enmeshed, which conditioned and restricted their action, as well as being an expression of it.

Most obviously, reconstructing spaces from their contents, rather than as bare architectural outlines, allows us to identify the way spaces actually functioned,[33] rather than their hypothetical uses; e.g., for crop storage (Grinter), animal stabling (Walmsley), refuse disposal (Putzeys *et al.*), craft activity and sale of goods (Khamis, Baird), etc. A successful visual reconstruction also may afford the potential to differentiate between several possible interpretations of a space, or at least to narrow down the possibilities (see for example Manière-Lévêque). The evidence from objects might be especially useful where it contradicts or conflicts with the evidence of a building's ground plan, or with assumptions about the use of space based on textual sources (see for example Michel on the function of the *diakonikon* in the late antique church).[34]

A visual reconstruction may also not only show us the *function* of a space, but also its overall *character*. The study of the furnishings of rooms and spaces is particularly valuable this respect. Furnishings in effect do as much to establish the character of a space as the architectural setting, yet have been studied far less.[35] Caseau, for instance, in her paper on church objects (see also Michel), emphasises the importance of the less tangible things used to create a particular setting—such as the smell of incense, or the effects of fabric drapes and hangings (one might

[32] Allison is the pioneer of this approach, particularly with regard to domestic space; see especially Allison (1999a); (2004).

[33] Allison (2004); Berry (1997).

[34] Allison (2004) notes that artefact assemblages at Pompeii sometimes do not correspond with the function suggested by textual labelling. Berry (1997) 193–94 documents the multi-functional nature of spaces at Pompeii.

[35] Ellis (2000) 145–65. See also Russell (2001) for a recent consideration of furnishings from Antioch; Thébert (1987) for some consideration of interior furnishings in a description of houses from Roman North Africa.

observe that curtains to reduce sound have the effect of demarcating space aurally as well as physically). These are things that archaeology cannot easily recreate and whose possible effects are often overlooked. Here we are dependent on an interdisciplinary approach drawing on all the sources of evidence outlined above, to reconstruct the space in its intangible as well as material aspects.

Visual reconstruction is also important in the understanding of the aesthetics of a space, taking into account the integrated appearance of all the features of an interior as a particular artistic scheme,[36] rather than merely immovable and durable features such as walls and floors and their decoration (see Swift here on the decorated spaces of late antique dining). Through a reconstruction of the formal aesthetic qualities of a space, as well as its exact size and location, we may also gain insights into the kinds of behaviour that were felt to be appropriate to it.[37] In this and other ways, visual reconstruction may act as a major source to understand the behaviour described in texts—since it provides the fullest possible 'setting' for the actions described (see, for example, Parani on suitable dress for particular occasions and spaces). Reconstruction can also, more prosaically, be used as a tool to re-imagine which decorative features would have actually been visible in a room—as Allison has noted with respect to Pompeii[38]—would a mosaic floor, for instance, have been open to viewing, or obscured with furnishings and the material objects of daily life? Related to this, and again as put forward by Allison a more nuanced view of how people would have moved through and around spaces becomes possible. For example, were some parts of a room habitually blocked by furniture or storage items?[39] Was only one of two doors a practical entrance to a room or building, when the everyday position of material objects is taken into account?

Finally, visual reconstruction is often a tangible reminder of the shifting use of a space through time (demonstrated particularly by Putzeys *et al.* for domestic space and by Michel for sacred space), and gives pause to archaeological analyses that categorise room function as if it is

[36] See Dwyer (1982) for a study in the early Roman period of the decoration and contents of 5 Pompeiian houses, which was far ahead of its time in its integrated approach to décor.

[37] See Wharton (1995) on the decoration of late antique baptisteries and its relationship to the use of the space.

[38] Allison (1999a).

[39] Allison (1999a); see also Allison (2004) 65–70 on storage in 'display' areas.

permanent and unchanging. Room and building function may change through long periods of occupation, and this may be visible only from the final contents of the room in an abandonment deposit, though it may also be evident from alterations to the built environment or to the decoration of a room. Use of space may also, of course, vary with the time of day, or season of the year, and for evidence of this we are much more reliant on the study of artefact assemblages within spaces which may attest to these more ephemeral variations in use.

Visual reconstruction is certainly the most obvious goal of material spatiality, but objects themselves are also freshly illuminated though contextual analysis, as is evident from recent work on Roman artefacts.[40] This, therefore, is the next subject for investigation.

Enhancing the Understanding of Objects Themselves

Firstly, studies of this kind add to what we can establish from other sources. Evidence relating to the use of an object in a particular space may question an established idea of its use—for example, as Vroom notes, censers have been found in domestic as well as religious contexts in late antiquity, perhaps suggesting that they enjoyed a secular as well as a sacred function. It may also, more fundamentally, provide much needed evidence for dating, where an object type is previously mostly known from collections of material divorced from their context (see for e.g., Mitchell on magical amulets).

However, more importantly, by looking at objects in context, within the spaces where they were found, and as artefact configurations or assemblages,[41] we can achieve a better understanding of not only what they were intended for, but also how and where they were used, and how sets of artefacts were used together. The obvious example is sets of silverware for dining. The early Roman House of Menander treasure, found inside a Roman domestic house, is the most important single assemblage in this regard, and an examination of its contents allows an in-depth investigation of the dining experience (e.g., number of guests, number of courses, types of food, number of vessels per guest, etc.). It is also possible to study other assemblages of silver found in hoarded

[40] See Painter (2001).

[41] See Cool and Baxter (2002) for a discussion of the potential of Romano-British artefact assemblages. Hingley and Willis (2007) is a collection of papers that includes consideration of artefacts within their particular contexts.

contexts which link them together as particular 'sets' and gain from them valuable insights with regard to the habits of late antique dining.[42]

It is also important to consider the multiplicity of roles and purposes that an object may have had, particularly with respect to the 'biography of the object', i.e. changes in the use and meaning of an artefact through time.[43] An obvious Roman example is the re-use of pottery sherds as counters.[44] There may, however, be multiple uses for an object that are not visible through physical alteration of the object itself. The spatial arrangement of artefacts and assemblages, therefore, is especially important in understanding their use phase, particularly the *location* of objects within specific spaces; though, frustratingly, artefact positions within building are often disturbed or relate to storage rather than use.[45] Nevertheless, the potential of spatial studies are well-illustrated by Michel, who is able to differentiate between firstly the storage of relics, and secondly their prominent display for veneration, in the context of the late antique churches of Palestine. Reconstructing the placement of relics for display allows the reconstruction of the act of veneration by the faithful, while evidence relating to their storage might instead reflect or construct their perceived spiritual value or potentiality of future use. Here we are able to see two different and co-existent manifestations of the 'social life' of the artefact.

Re-integrating objects with spaces is often a reminder of the almost invariable use of objects in social display. Vroom illustrates, for example, the varied paraphernalia littering the dining context—textiles and furniture as well as dining equipment itself. This material is perhaps not so much for utility as to display elite status through the sheer proliferation of specialised and expensive equipment and luxurious accessories. Similarly, incense is discussed by Caseau with regard to the way that it can be used to create a particular atmosphere and appropriate mood; but it also draws attention to the disposable wealth of the church through the conspicuous consumption of expensive commodities.[46] The context in which an object is found may also reveal changes in the value attached to that object across different time-periods. Gelichi, for

[42] See Martin-Kilcher (1989); Künzl (1997).

[43] Kopytoff (1988); see Marshall and Gosden (1999) for a more archaeological consideration of artefact biographies.

[44] See Pollard (1987) for a discussion of these objects.

[45] Berry (1997) 193.

[46] See also Allison (2004) 139–42 on display material.

example, suggests that one explanation of the occurrence of pottery in a hoard might be that it has become a valued object, perhaps through wider scarcity of this commodity in Late Antiquity.

Objects can also be viewed as a kind of material embodiment of the activities to which they relate, again, usefully studied through an examination of assemblages in the social context. For example, the well-hoards described by Gelichi could be considered as a concrete 'representation' of the hoarding activity carried out. This is well-illustrated by Gardner, too, in his consideration of the daily habits and routines of those living in late Roman forts which can be traced through the material record, as a kind of 'sediment' of the activity carried out.[47]

As already noted, the way in which an artefact may be used differently to its implied design function creates considerable difficulties in the interpretation of assemblages. A further difficulty is the varying meaning attributed to artefacts by contemporary observers, which is brought out by a consideration of material spatiality. Even when objects were used in a manner consistent with their design function, the way that they will have been perceived will obviously vary according to the observer within a specific cultural context. This is nicely illustrated by the pair of papers that consider late antique dress. Harlow illustrates, through a consideration of early Christian writers, that perception is dependent on a particular cultural perspective. So to Jerome, the dress of women marks them all out as potential whores, though the message that women themselves were trying to project through dress (as documented by Parani), was quite different.

Once a more nuanced understanding of artefacts within spaces is achieved, the potential is rich to consider further the articulation between material spatiality and social behaviour.

How do objects within spaces condition or influence behaviour within that space?

As noted above, material culture is essential to social performance and to the creation of an arena within which performance takes place. The material world around us is not just a passive reflection of human activity, but also constructs and facilitates particular behaviour. The totality

[47] See also Gardner (2003) on materiality.

of one's environment constrains behaviour in all kinds of ways—for example by acting as a setting that promotes some kinds of activity and hinders or prevents other behaviours.[48] The disposition of objects, therefore, provides particular information about the way in which certain activities were *necessarily* carried out. The study of the material spatiality of store-rooms or archives, particularly with regard to the use of and access to the stored material, may be used as an example, suggested by Fiema's paper on the annexe rooms of the Petra church. Fiema observes that the way that documents were stored in the Petra church lacks organisation, implying an archive that was rarely accessed—a final storage place for documents no longer needed, rather than an active archive of material to be referred to on a regular basis. Such contextual information clearly makes a significant contribution to our understanding of both the documents themselves and the wider social context, in which, Fiema suggests, churches were increasingly taking on the roles of former government administration, including that of document archiving.

One could examine the same kind of thing in relation to shops. Taking into account the contents and furnishings as well as the space itself, how many people would fit into the shop at one time, and by implication, was this a relatively public or private transaction? Where were the goods placed for display or sale? Was access to them controlled or open, and what are the implications for the social exchange that took place in the buying of the goods? Baird, for example, notes that buildings used as shops at Dura Europos have lower windows than domestic buildings, allowing a view into the interior, and low benches along interior walls may have been used to display the goods for sale. The implication is that the commodities for sale would have played a role in enticing the customer into the shop, and that they were available for inspection by a prospective buyer on entry into the space; the transaction in this case appears to have been relatively open, and driven through customer choice.

Objects such as furnishings or dress items, for example, can also be used to control behaviour in a less direct way, by evoking a particular atmosphere—for example, of formality, on an occasion of social dining, or to construct a space as more or less public or private. The

[48] See Lefebvre ([1974] 1991). Ellis (1991a) and (1997) considers the relationship between space and behaviour in the late antique domestic context.

paraphernalia of the late antique law courts may also be cited here as a relevant example: law courts were almost entirely defined by their use of dress and 'powerful' objects, and not by their architectural setting.[49] The objects thus act as prompts to appropriate behaviour and props through which to enact it (see also Swift, this volume). The construction of the hierarchy of a space through material objects is important here. The addition of furniture, furnishings and equipment, for example, could be used to temporarily transform an everyday space into an elite space, with the attendant modification of behaviour within the space that this suggests. Material culture could also be used in a more permanent form to alter the hierarchy of an interior space. The egalitarian tendency of a space presupposed by a centrally planned church, for example (in which all have equal access to the central focal point) might, as at San Vitale in Ravenna,[50] be overridden by the placement of furnishings and decoration in an axis from less-to-more holy which also mirrors the social structure of the congregation and their allowed proximity to the altar. Though not much explored in this collection of papers, gendered division of space might also potentially be visible through the interior decoration, division and furnishing of a space, or the objects found there, with all the implications that this holds for the position of men and women in a society and their relationship to one another.[51]

Finally, Mitchell's paper on the Tri-conch House at Butrint draws attention to another aspect of late antique material spatiality—the function of decoration and of objects to control not the everyday inhabitants, but its population of demons and spirits, bringing us further into the mental spaces of late antique living.

The social function of spaces of course changes through time. Once we have made the link between the nature of spaces and the behaviour that takes place within them, it becomes apparent that changes in the use of particular spaces are fundamental to many other kinds of social transformation—for example, in collective outlook, in social dynamics, or in cultural traditions. Beginning with a focus on material spatiality

[49] Lavan (2003b) 325–27.

[50] See Deichmann (1958) for documentation of the architecture and mosaic decoration.

[51] On this, see Van Driel Murray (1995); Allison, Fairbairn, Ellis and Blackall (2004); Allison (2006).

may ultimately lead us towards a fresh perspective on the much-studied transition periods of Late Antiquity.

Transformation of Space and Changing Mental Landscapes, Behaviour and Social Norms

Gardner raises this question in his important paper, arguing that social change is made manifest not only from the top down (e.g., through the political and economic decisions made by those in power) but also from the bottom up, i.e., in the daily routines of people's lives and in gradual changes to ways of living that, imperceptible as they are at the time, eventually result in a permanent transformation of society. It is therefore important, he suggests, to focus on the evidence for these incremental, quotidian changes, and to try to understand them. This type of approach should prove especially fruitful when used to interpret the depth of contextual evidence now becoming available for many late antique sites, including many of those described in this volume. Gardner examines, for example, the daily life of the inhabitant of a late Roman fort, whose changing pattern clearly relates on some level to the wider transformation of the Roman army in Late Antiquity and its eventual absorption or disappearance in the West.

One of the most widely documented transformations of Late Antiquity is the change in use often found in elite domestic space, in both urban and rural contexts. The way in which urban space is divided up changes, with, for example, the alteration of houses into multiple-occupancy buildings with single entrances suggesting their ownership by landlords, with all the attendant implications for the likely behaviour of tenants as opposed to owner-occupiers within these spaces.[52] More dramatically, building use is often completely altered; this is particularly well-illustrated by the evidence from Sagalassos (Putzeys *et al.*) and Nicopolis (Poulter), and also evident at other sites discussed in this volume, such as Butrint (Mitchell) as well as more widely across the late antique world.[53] Buildings that were once the residences of the elite, with attendant wall-paintings, mosaics, and grand architecture, are seemingly abandoned by their owners and enter a phase of secondary use as industrial sites, store rooms, and sites for animal stabling and

[52] Ellis (1985); (1991b); (1998); (2000) 110–12.
[53] See for example Esmonde Cleary (2000); Christie (2004).

even waste disposal. Destruction deposits have preserved the evidence of secondary use at many sites in the East, and provide rich evidence for a better future understanding of this widespread pattern of behaviour, and its relationship to wider social and economic factors. The transformation of the value attached to this type of space is perhaps the most striking aspect of this trend. The functional qualities of a masonry building—the way that it protects activities and things from an environment detrimental to them—are now privileged over a symbolic function, i.e., the use of a large and elaborate space to signal hierarchy and power, and as an arena for the performance of luxury. The use of buildings for waste disposal shows an even more radical transformation, and a disregard for the intended use of the space (the use for which it was designed) which signals a marked change in social norms.

Other buildings and spaces within the late antique urban context are also transformed from their use in the early Roman period; changes in the public spaces of the town are particularly striking in some instances, for example the transformation of the baths basilica into a market at Wroxeter.[54] Evidence of installations and material culture found within these spaces—for example, the frequent presence of metal-working hearths, residues, and the like—provides important evidence in understanding these changes, though it can be interpreted in diverse ways.[55] These kinds of transformations of public space can be found across much of the late antique world, though in some areas greater continuity can be attested until the 6th and 7th c.[56] At Bet Shean, where destruction deposits provide particularly comprehensive evidence (see Khamis, this volume), there is a radical change in the organisation of the city from late antique to early Islamic, with wide porticoed streets replaced by narrow lanes and crowded shops; concurrently, many public buildings are abandoned. Though the commodities sold in the shops of the city are likely to have remained similar throughout the period of transformation (as Khamis notes), what we are looking at here is a fundamental transformation of the idea of the city; what was once a

[54] Barker *et al.* (1997). See also Ellis (ed. 2000).

[55] Once often characterised as 'squatter' occupation. For an alternative interpretation focusing on the ritual significance of the activities carried out, see Rogers (2005). See also Bowden (2006) 195–226.

[56] Liebeschuetz (2001) 29–103. See Leone (2003) for a consideration of evidence from North Africa. Lavan (2006) documents continuity in the 4th and 5th c. of the use of the forum/agora in the East.

space for social promenade and the 'performance' of a Graeco-Roman ideal of civic life becomes a space for the enactment of economic success, the city as market, rather than as cultural centre. Prosperous living is now all about commerce—a conclusion that can also be drawn from the different evidence put together by Walmsley's team at Pella and that of Waelkens at Sagalassos (see Walmsley, and Putzeys *et al.*), where the storage of commodities becomes an important part of the role of the house, visible to one's guests as they enter through the central courtyard. Walmsely suggests that the driving force behind the change in house types from terraces to individual courtyard style buildings was primarily economic (evidence of courtyard living pre-dating the earthquake at Pella shows that it was not a response to this event by a change in house style), providing more space to store goods and over-winter valuable animals. The *display* of economic success is now also clearly important. Such fundamental transformations in styles of living must also contribute considerably to other social changes, such as the impact on relations between households implied by a 'privatisation' or 'commodification' of the social spaces of the city.

Improving Field Practice

Field archaeology, as noted above, plays an important role in the reconstruction of the spatial configurations of artefacts. Texts are of great help for descriptions of daily activities and objects used, but their number is limited and they cannot endlessly provide new data. As regards the iconographic evidence, we are confronted with similar problems. Whilst pictures give a very vivid image of object configurations, we only have a small quantity of them and their number is not going to increase, or only very slowly. This means that a focus on field archaeology is the best way forward. Obviously, there are currently many problems with this source: there are large gaps in our data regarding different functional settings; the artefactual evidence is not always recorded with the necessary detail; and the post-excavation analysis and publication of results remain problematic. Further excavations, however, with accurate field methods and better recording systems, can address these shortcomings. One of the best examples of how archaeological evidence can contribute to the study of object configurations is the Archaeological Exploration of Sardis by Harvard University and especially J. Crawford's

monograph on the Byzantine shops. This gives contextual information which is unparalleled elsewhere.[57] His presentation of the artefacts in groups of objects within their architectural setting allows a recreation of the activities taking place inside the portico and the shops which would otherwise not be possible. This makes the volume one of the most frequently cited in studies on commerce and retail in Late Antiquity: not because of its extraordinary material—surely equally well or better preserved assemblages are found elsewhere in the East—but because of the way that it revives the past. Very few other sites with late antique material have managed to publish their data with comparable attention to contextual information.

Fieldwork Research Agendas

To reconstruct human behaviour in Late Antiquity, more data are necessary from residential, commercial and productive zones. In the eastern Mediterranean the focus of research in most urban excavations is directed to the political heart of the town and its major public buildings, the remains of which are frequently still visible on the surface. However, in order to study the behaviour of a town's inhabitants, more effort should be made to study their houses, their workspace, their shops, etc. By and large, the main part of any city consisted of residential quarters, but these are grossly under-represented in excavation reports compared to the major monuments which, although impressive architecturally, contain very little evidence of the daily routine of city life. Studying contexts from the residential and commercial zones and the artefact configurations associated with these zones outside the city centre has a much greater potential for reconstructing living conditions in Late Antiquity, as is well illustrated in this volume.

In this regard, more attention should be paid to the houses of the non-elite, which remain largely unstudied. In general, most of our data concerning the past as lived focuses on the elite.[58] The reason for this bias is twofold. Firstly, archaeologists (including their private sponsors and even funding bodies) are greatly attracted by the richly furbished mansions of the elite. Secondly, the elite, with its great consumption of resources, has left a more prominent trace within the archaeologi-

[57] Crawford (1990).
[58] Sodini (2003) 27–42.

cal record. As a consequence, almost all our in-depth evidence for less wealthy residences comes from Ostia, with its well-studied insulae or housing blocks. However, the artefactual evidence from this site is highly problematic—as is well known. Further data are therefore needed, especially from large-scale urban excavations. The inevitably partial nature of the archaeological record (affected, for example, by variable site formation processes), means that we will need to assemble the evidence provided by many different sites to reconstruct a more general picture of daily life in Late Antiquity. The lower classes of urban society, especially, will have tended to use objects in more perishable material such as wood, basketry and leather. These hardly ever survive, with the exception, of course, of evidence from Egypt, e.g. the site of Karanis (Fayoum, Egypt).[59] Excavations by the University of Michigan between 1924 and 1935 revealed several multi-storied houses, built to suit the needs of rural families, who laboured to provide themselves with the basic necessities of life. Amongst the contents of these houses, a wide variety of basketry, wooden tools, leather, and cloth artefacts were found, illuminating the living conditions of the end of the 5th c. A.D., when the village was abandoned.

Not only houses, but also commercial and productive space in an urban context should be better examined. Shops, taverns and workshops formed an essential part of urban life, but the object assemblages used in such spaces are little documented. Although commercial and productive premises such as bakeries, butchers, *fullonicae* and bars must have been present in most towns, they are poorly known outside Pompeii, Ostia, Timgad and a few others (see bibliographic essay, this volume). Even at these sites, the artefactual evidence has received little attention, making the need for new data on commercial space more critical.

Clearly, new excavations are necessary, of a large enough scale to address these issues, while the existing ones—especially in the east Mediterranean—should where possible shift their focus of research from the monumental centres to the periphery and from the upper classes of society to the middle and lower class. This will require the courage of people working in the field to propose research themes focusing on that part of the population which—although largest in number—is least visible. In the end, this is what makes a city like Pompeii so exciting. It gives us an idea of the urban fabric as it was, from rich to poor, though

[59] Gazda (1983).

it must be remembered that within cities the poorest, who slept under porticoes with few possessions, will always remain difficult to detect.[60]

Site Strategies

On the macro-level, the study of material spatiality can be addressed with intensive field surveys. Moreover, as large scale excavations of towns become less feasible, urban surveys will gain in importance. The value of such urban surveys for studying functional zoning during the last, late antique occupation period of towns has been shown from the 1980s onward at Greece,[61] Turkey[62] and Spain.[63] Their groundbreaking work was followed by many other projects each raising their own methodological issues.[64] During the last decade, results from these urban surveys have been supplemented with the data of modern techniques such as geophysical prospection (magnetometry, resistivity, georadar) and remote sensing (aerial photography, satellite pictures).[65] These techniques, which are becoming common practice,[66] allow the identification of features which are invisible at the surface, at the same time placing them within the urban framework. This makes them a promising tool for contextual research, especially if they can be combined with test soundings.

To improve our data on the spatial distribution of objects on the micro-level, we need more material from sites with high quality deposits using field methods designed from the start to produce good contextual evidence. Appropriate field methods are not just a question of careful stratigraphic excavation, one also needs to pay attention to the formation of the archaeological record.[67] Most archaeological data from Late Antiquity comes from settlements which were gradually abandoned, and the dispersal of objects at these sites may thus

[60] Sodini (2003) 49.
[61] Bintliff and Snodgrass (1985); (1988).
[62] Alcock (1991).
[63] Keay (1991).
[64] For an overview, see Frankovich, Patterson and Barker (2000). An increasing number of these project are now reaching the stage of final publication, e.g. Creighton, Keay and Remesal Rodriguez (2000); Bintliff, Howard and Snodgrass (2007); Martens (forthcoming).
[65] Pasquinucci and Trément (1999); Gaffney and Gater (2003).
[66] Just to give some examples from Asia Minor: *Aphrodisias*: Smith and Ratté (1997); Ratté (2001), *Ephesos*: Groh (2001), *Ilion*: Jansen and Blindow (2003).
[67] Schiffer (1987).

reflect the abandonment or temporary reuse of the settlements rather than the living patterns of the settlement's principal occupation period. People adapting to changing circumstances left, taking most of their belongings with them, and thus leaving few indications of the original use of rooms and structures. These were in many cases even further disturbed by post-abandonment (squatter) occupation. As a consequence, the relation between the material as found and the living patterns they represent should be examined very carefully before interpreting the evidence. This does not mean that we should only look for Pompeii-type occupation deposits, rather that the formation of the archaeological record should be thoroughly assessed.[68] Waste disposal areas (pits and rubbish heaps) for example should be given a high evidential value. In many cases, waste deposits reflect the occupation of a structure directly, whilst other artefactual evidence might represent the use to which a structure was put after abandonment. Furthermore, rubbish deposits can yield artefact assemblages related to specific activities such as food consumption, food processing and craft activities containing more complete configurations of artefacts than will ever be found in the houses or workshops themselves as these were usually kept clean. In this regard, the content of refuse pits and waste disposal areas can provide us more information on daily life than many abandonment deposits do.[69] Clearly, identifying site formation processes forces the archaeologist to recognise the interpretative limits of their material. The potential of the archaeological record for recreating the past is bound to its own formation history. As establishing the exact nature of the structural and artefactual evidence is one of the major aspects of a contextual study, it also provides the framework within which any interpretation can be made and these interpretations should always be answerable to the data.

At the same time, more time and resources should be expended to record mundane artefactual evidence and not only high value or well-

[68] According to Binford (1981) the identification of cultural formation processes (i.e. changes in the organisation of a site by human actors) implied that there was a set of a priori expectations about the condition in which the archaeological record should be found. Schiffer (1985), however, argued that that the formation processes at play on a site are not identified in order to look for sites with Pompeii-like assemblages, but rather to understand how the site came into being and what implications this process has for the research questions that can be asked. For a short summary of the debate, see Lucas (2001) 148–61; Papaconstantinou (2005) 5–6.

[69] See, e.g., Raventos and Remola (2000).

preserved objects. Broken pottery, animal bones, plant remains, etc. all contribute greatly to our knowledge of living conditions in Late Antiquity if retained for proper post-excavation analysis. Considering all these types of evidence has been common practice in the West for a long time, but on excavations in the eastern part of the Mediterranean, the interpretative value of these material categories is still vastly underestimated. Even if they are properly collected and registered, the will and the resources to study them in detail are frequently lacking, whilst the restoration of public buildings and statues consumes available resources. However, the study of amongst others animal bones, macroscopic botanical remains, and residues, can contribute greatly to our understanding of the functional arrangement of buildings, as shown for example by the evidence from the Plaça del Rei in Barcelona.[70] A detailed study of all available material from contexts at late antique Barcino gave much firmer ideas, for example, regarding the functioning of the different spaces in a *fullonica*, a winery and a *garum* and salt fish factory than it would otherwise be possible to attain. Furthermore, by considering artefacts as part of an assemblage comprising different material categories, interpretations can be based on the data as they really are. In the past, interpretations were frequently based on exceptional artefacts and not on the bulk of the evidence, obviously creating bias in interpretation. This is well illustrated in this volume by Poulter, who shows how wrong or ill-founded interpretations can result if all aspects of the archaeological record are not taken into account.

Excavation Method

For a contextual approach to the archaeological record, detailed modern systems for recording the finds and their mutual associations are essential. Whilst every archaeologist has his/her own ideas on the efficient organisation of excavations, his/her data should be transparent and comprehensible to third parties. Therefore, industry standard systems for recording are imperative. Unfortunately, deficiencies still exist in the recording of artefact-rich levels, especially on archaeological projects in the eastern Mediterranean. Even many of the better sites in this region are excavated according to large stratigraphic units, without any planning of the internal distribution of finds within them. When

[70] Beltran de Heredia Bercero (2002).

it comes to object spatiality such systems do not suffice, as they do not allow the necessary degree of detail. In addition, they are difficult to access by outsiders, and the way in which data is collected frequently makes meaningful comparisons with material from other sites difficult, if not impossible.

In the West, standards for single context recording based on the Harris Matrix[71] were already established more than 20 years ago, notably that of the Museum of London Archaeology Service (MoLAS).[72] The MoLAS definition of single context, however, has a number of both practical and methodological problems which makes the system in its pure form unsuitable for complex urban excavations with major structural remains. According to the MoLAS system, each different action or event requires the creation of a new unit, so, for example, every wall has to be dissected into its smallest components. This is not feasible at the late antique sites in the eastern Mediterranean, with their extensive architecture and their complex building phases—probably one of the reasons why the system has never been widely used there. Nevertheless, a modified version of the system which allows one to compare stratigraphic units at a basic level and leaves enough room to refine the methodology for very rich or 'essential' deposits can still be used, and probably achieves the best results. Such systems were applied with success at, e.g., Butrint[73] and Beirut.[74]

Of course, increasing the level of detail during recording slows down considerably the pace of the excavation, but this might be necessary all the same: the amount of valuable data recovered is much greater. The trick is to decide in the field when more detailed recording is necessary, meanwhile guaranteeing a standard level of detail for all deposits which should be quite thorough already. At any time during excavation, it should be possible to re-evaluate whether the recording system used is adequate enough, or indeed too detailed. Archaeologists in the field thus will be able to obtain as much data as possible, with a high level of detail, and in a cost-efficient manner.

Such a system also requires that finds are examined at least preliminarily on site, with finds specialists giving their opinion about the nature

[71] Harris (1992).
[72] *MoLAS* (1994).
[73] Hodges, Bowden and Lako (1999).
[74] Perring (1997–98); Thorpe (1998).

of stratigraphy currently under excavation.[75] Already in the field an effort can and should be made towards a more integrated approach to the archaeological data. This brings us to another flaw of the MoLAS single context system, namely that it completely disconnects the work in the field from post-excavation analysis. The system was conceived out of the 'New Archaeology' and the wholly ill-conceived desire for 'objective recording', requiring the archaeologist in the field to focus on detail without keeping the larger picture in mind. However, even during excavation, archaeologists should arguably visualise the past as lived rather than just record the material remains.[76] More than simply registering the excavated architecture and stratigraphic units, the archaeologist in the field needs to think about archaeological features in terms of how people constructed them, how they were used and how they became disused.

Pioneering work in this direction has been done by Framework Archaeology in the UK, which conceived a recording system from a review of the strengths and weaknesses of the Wessex and Oxford systems, as well as the MoLAS system.[77] This new system depends on data feedback to supervisors and excavators so that an excavation can be shaped as it progresses. Of course, on some projects such a feedback process is simply not possible, but the most important thing is that archaeologists are aware that they are revealing historical processes and traces of human agency.[78] As such they should visualise the framework in which daily life took place, rather than simply recording the excavated architecture and stratigraphic units. Not that the archaeologist should be carried away by his/her imagination, but he/she should reflect on what the archaeological evidence at hand can reasonably tell us of how things looked, and how objects were used together.

Associating finds with the smallest sensible archaeological unit is a start. But in certain situations or for certain deposit types, such as well-preserved occupation deposits, this does not suffice. In such cases, all artefacts should be located exactly in the field using a total station and placed on maps afterwards. This level of detail might be essential

[75] Hodder (1997) 699; Hodder (2000).
[76] Chadwick (2003); Chadwick (1998).
[77] Andrews, Barrett and Lewis (2000). The methodology used is also described in the first section of the excavation results from Heathrow Terminal 5; Lewis *et al.* (2006).
[78] On the theoretical background of "agency", see especially Dornan (2002); Dobres and Robb (2000).

as it can falsify common-sense interpretations which would easily be obtained by collecting the material in bulk. This is well illustrated in Poulter's paper in this volume, in his study of the location of pieces of window glass in an early Byzantine church at Nicopolis.

Post-Excavation Analysis and Publication

Besides finding the best method of recording archaeological evidence in the field, more attention should be paid to post-excavation analysis and publication. In particular, the large-scale excavations of towns in the eastern Mediterranean, which potentially have the best material to enhance our knowledge on object spatiality, lag behind when it comes to modern approaches to the archaeological record.

In many eastern Mediterranean post-excavation analyses, it is still the case that only complete objects with an art-historical value receive attention, while the many fragmented artefacts are regarded as little more than inconsequential debris, as they are in a broken and useless condition. Because of the large quantities of bulk finds, archaeologists do not take the time to properly record and study them. The potential of fragmentary objects is not fully assessed. Sherds of pottery, for example, are only used to establish a date for the context at hand, even though the distribution of functional types can also provide essential information on patterns of daily activities.[79] The distribution of these broken artefacts provides a much more complete picture of everyday life than the recording of only exceptionally well preserved examples. If we want to improve our data, a more holistic approach to the archaeological record is necessary, integrating all artefactual evidence within its spatial and stratigraphic context. To study the full complement of the archaeological material and evaluate patterns in their distribution, analytical rather than descriptive techniques should be used such as statistical analysis (e.g. correspondence analysis) and computer applications (databases, GIS). The use of GIS especially can be a step forward, as it allows the combination of archaeological databases with mapping the artefacts in the area in which they were found.[80] As such GIS can immediately provide a visual way of

[79] On the possibilities of pottery studies beyond typo-chronology, see (amongst many others) Poblome, Malfitana and Lund (2007).

[80] Wheatley and Gillings (2002); Conolly and Lake (2006).

analysing and presenting find distributions. However, while the use of geographical computer applications is well-established for surveys, i.e. the position of sites and material in the landscape, their potential for intra-site analysis has not been fully exploited. Yet, to understand the organisation of daily life through the distribution of artefacts in a site, GIS-systems offer rich potential.[81]

One of the greatest obstacles to studying objects in context comes from the way excavation results are published, in the happy event that they are published at all. In late antique excavation reports, structural remains and artefact configurations defining the use of space are only seldom published together. Objects are often only referred to in the margin, or mentioned only in so far they support a specific hypothesis of the excavator. In addition, architectural features are described separately, while the artefactual evidence is further subdivided into several specialist studies according to its material category, which often ignore the functional similarity of objects made from different materials. In this way the spatial information which might be used to distinguish the spatial patterns of daily life is broken up.[82]

To overcome this, archaeologists need catalogues of finds which are also organised by context rather than by material category and type.[83] This might be achieved by means of electronic publication, e.g., on the internet, which allows a wider spread and a graphically more appealing way of presenting the archaeological data. Whilst monographs could still be used to present the main line of argument, the artefactual evidence and its spatial distribution could be made more easily accessible in online databases. Recent work by the University of Reading at Silchester is reaching new levels of sophistication in this direction, particularly in its use of an integrated database (IADB).[84] This database allows the user to examine objects from, e.g., the Late Roman contexts of Insula IX both spatially, and in combination with one another.[85] In addition, it aims to make the entire site archive of Silchester available on-line via a front-end plan of the excavation area. Similar integrated database systems have been or are currently being

[81] See, e.g., Laurenza and Putzolu (2002); Anderson (2004).
[82] Conolly (2000) 53–55; Lucas (2001) 65–106.
[83] Russell (2001) 79–80.
[84] http://www.silchester.rdg.ac.uk/later/index.php
[85] Clarke and Fulford (2002).

developed, e.g., **that for the site of Nabonidus**.[86] The importance of such databases exceeds their value for the sites for which they were initially developed, as they allow other projects to use their framework to record, process and eventually publish their own excavations.[87] This makes them a universal platform for both on-site data gathering, post-excavation research, and publication. As such they promise to make a whole range of information inherent within the archaeological record easily and uniformly accessible.

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[86] http://www.nabonidus.org/

[87] The IADB for example is also being used at Norwich (The Butrint Foundation); Southampton (Noviodunum Project) and Kemble (Cotswold Archaeological Trust) with others in the pipeline.

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BIBLIOGRAPHIC ESSAYS

MATERIAL SPATIALITY IN LATE ANTIQUITY: AN INTRODUCTION TO THE BIBLIOGRAPHY

Luke Lavan and Toon Putzeys

The bibliographic essays presented here will not provide a synthesis of research on material spatiality in Late Antiquity. This would be extremely premature, as the subject is very young. Rather the essays will try to list the most important evidence we have to date for questions concerning everyday spatiality, whether this evidence be architectural, structural, artefactual, pictoral or textual. In order to keep the essays comprehensible and coherent, it was decided to concentrate on aspects of (generally urban) life for which most material is available from different sources. These include: commercial space (shops and workshops), industrial space (production centres), domestic space (houses), religious space (churches, monasteries, synagogues and mosques), and political space (forts, imperial palaces, praetoria, law courts). Rural spaces, notably those involving agricultural processes, are covered less thoroughly, as the current state of research does not currently permit a detailed investigation outside the near-east.

The very varied nature of the source material has had an impact on the structure of this essay. For some spaces much stratigraphic evidence is cited, whilst for others attention is devoted to literary sources or architectural repair. The latter has been included especially when there is little other evidence for everyday activities in a given space, whilst stratigraphic evidence where it exists, has been given preference. Furthermore, an exhuastive empirical collection of data has not been undertaken. This would have been of little value when high quality evidence is exceptionally rare, and when each source type brings a vastly different perspective. Thus a decision has been taken to concentrate on the best preserved or the highest quality evidence, since this is the most complete information on object spatiality we have and may provide a framework on which to built the interpretation of more fragmentary data. Other revelant material, when not presented in full, can generally still be accessed through the works cited. For some topics coverage will include references to high quality evidence from the early imperial period—notably Pompeii. This seems necessary, as artefact

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configurations of the late antique period are not always available and the pictorial/textual evidence is much scarcer then that of previous periods. Furthermore, many patterns of everyday spatiality seem to have been shared throughout the Roman period, making it reasonable to mention evidence from the imperial period if no late antique material is available.

The conception of spatial types in this essay, as in much of the rest of the volume, depends primarily on those found in literary sources, set within wider categories suggested by contemporary research. Thus in political space one finds 'praetoria', 'fora' and so on, and in religious space 'churches', 'synagogues' and 'temples'. Here we may disappoint some archaeologists who would prefer to see a debate about space generated by encounters with the material evidence. Within reason this is a valid reservation: it can be sensible to use artefact assemblages to classify types of workshop, or sub-areas within others, such as functional parts of houses. But it is our view that the cultural spatial concepts found in textual sources are the best ways of structuring enquiry into space in Late Antiquity, especially into political, social and religious space. They do not represent a privileged view of a distant literary elite but widely shared cultural concepts reflected in all textual sources, including papyri, graffiti, etc. Nevertheless, ancient categories must be modified and explored in terms of the material evidence, just as textual studies allow us to challenge modern misconceptions of spaces mentioned in ancient sources, and to reveal discrepant experience when attested.

Finally, this essay self-consciously attempts to produce a stereotyped view of different spaces in Late Antiquity. It does not try to present a detailed chronological or regional perspective, which the evidence frequently does not allow. It also relates best to the world of the 4th to early 5th c. West and 4th–6th c. East, of prosperous Mediterranean urban communities, not decaying cities experiencing early medieval ruralisation. This is an important decision for a collection on late antique space, as it seeks to avoid some of the most controversial questions surrounding space generated by archaeologists working on late levels. But considering the late antique world as a whole, it does seem fairer to draw attention to the highly-structured spatial world of the prosperous East and Central Mediterranean rather than the cultures that eclipsed it, to describe a world which had more continuity with the Roman past, and its legal and cultural spatial norms, than with the simpler or radically different spatial regimes that followed it. This is not to deny that such processes as limited privatisation and domestic

subdivision occurred within monumental cities in prosperous central regions, or that some minor centres in the same region lost their urban character, but it is to assert that these processes occurred within a wider urban and settlement context in which an essentially Roman spatial order continued, in which spatial types were well-defined in terms of both architecture and behaviour.

DOMESTIC SPACE IN LATE ANTIQUITY

Toon Putzeys

Household Organisation

According to Ellis ((2000) 159) it is impossible to fully understand domesticity through studying artefact distribution, because the modern observer is unable to distinguish between the actual use of objects in a certain area and their storage. In addition, he argues, artefacts are not reliable in determining room function, due to their mobility in domestic space. There is also the problem of identifying the function of the artefact, which may change through time. Furthermore, because of the mobility of household furnishings, the usage of space can change frequently in a short period of time. While architecture and decoration reflect the intentions of the owner or architect, they do not represent the full scale of functions that rooms actually had (Allison (1999) esp. 3–5; (2004) 11–14, with bibliography). Household organisation in Antiquity was flexible and several rooms were used for a wide range of daily activities, even though they were designed and decorated for one specific purpose. Recent analyses of Pompeiian artefact assemblages have in fact proved such a multi-functional usage of rooms (Allison (2004); Berry (1997a) and (1997b)).

Unfortunately, houses with furniture and household implements left in the place where they were used or stored are rarely encountered in archaeological contexts: even household assemblages from Pompeii do not reflect 'a frozen moment in time' (Bon (1997); Allison (2004) 11–26, 201–203). During the occupation of a structure, the inhabitants continuously cleaned their houses of all objects hindering ongoing daily activities. When the building was finally abandoned, the residents normally took all their precious belongings with them, leaving only broken pieces or low value objects behind. In most domestic contexts, only this small fragment of the originally present objects and fixtures is found, as far as they were made in non-perishable materials. To interpret these meagre remains, comparisons with exceptionally well-preserved domestic assemblages are very important. Apart from the textual sources, rich configurations of domestic artefacts are a main

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point of reference for reconstructing the content of houses and household organisation in Antiquity. Full reports on the small finds from late antique domestic excavations, however, are seldom published, and even then they are collected in separate catalogues that are often ordered by material category instead of archaeological context or functional category. In addition, in most cases, more attention is paid to artefacts which are exceptionally well-preserved or which have a high art-historical value. This selective recording of finds, together with the fact that probably the largest part of the furniture and household implements is not preserved, give a biased view of the objects present in houses during Late Antiquity.

Hoards of household implements, often found away from houses themselves, frequently provide a better idea of house contents. Such hoards are generally a collection of valuable and less valuable domestic artefacts, which, even though they are no longer connected to the places in which they were used, form a configuration of objects belonging together. Examples are the Modena hoards and the Sevso treasure. Some idea of function can be gained from architecture, when features such as marble tables or panels survive, or decoration, such as mosaic floors, give clues. But most publications of late antique houses only consider the architectural layout of the building, focusing on the reception and dining rooms of large urban and rural villas. Our dependence on literary sources for reconstructing everyday life in houses is still strong: it is largely this which allows us to label rooms and to describe the daily rhythms of life: but the relevant source material, present in texts as diverse as Libanius, the legal codes, saints' lives, sermons and narrative histories has not yet been fully assembled, though "The end of the Roman House" by Ellis (1988) makes a good beginning.

The A.D. 749 earthquake in Palestine yielded exceptionally well-preserved deposits of domestic assemblages, providing insight into household organisation in the Early Umayyad period. At Pella, the earthquake caught humans and animals by surprise, trapping them in the middle of their activities with the objects they were using close at hand. Similar material can be expected from other sites in the region, but generally at these sites most attention has been paid to public monuments, leaving residential areas largely unexplored. Late antique houses with destruction deposits containing artefact configurations sealed within their architectural framework have also been found at Alexandria, Ptolemais, Beirut, Argos, Anemurion and Sardis. Other sites were gradually abandoned, leaving little material linked to the

occupation of the structures. Although the occupation deposits at such sites are not as rich as contexts from Pompeii or Pella, a detailed record of the small finds from domestic units provides further insights into the organisation of the buildings and daily life taking place within the structures. In order to reconstruct the occupation history as closely as possible, all available evidence has to be assessed, whether structures, decoration, artefacts, animal or plant remains, as has been done for Petra, the Fayum villages and at Sagalassos. Finally, the "Hanghauser" of Ephesus are being published little by little, but in a very thorough way. In a few years they will be among the best-documented residential units of the Mediterranean.

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Depictions: Bertelli C. (1999) "Visual images of the town in Late Antiquity and the Early Middle Ages", in *The Idea and Ideal of the Town between Late Antiquity and the Early Middle Ages*, edd. G. P. Brogiolo and B. Ward-Perkins (Leiden, Boston and Köln 1999) 127–46. Duval N. (1986) "L'iconografia architettonica nei mosaici di Giordania", in *I mosaici di Giordania*, ed. M. Piccirillo (Turin 1986) 152–56. Billig E. (1978) *Spätantike Architekturdarstellungen* (Acta Universitatis Stockholmiensis, Stockholm Studies in in Classical Archaeology 10) (Stockholm 1978). Cantino Wataghin G. (1969) "Veduta dall'alto e scena a volo d'uccello. Schemi compositivi dall'ellenismo alla tarda antichità", *RivIstArch* (1969) 30–107. Duval N. (1986) "L'iconographie des 'villes africaines' et la

vie rural dans l'Afrique romain de l'Antiquité tardive", in *Actes du IIIe Colloque sur l'Afrique du Nord antique et médiévale* (Paris 1986) 163–76.

Late antique dining

Most evidence of late antique dining is obtained from iconographic and textual evidence describing or representing dining scenes in high society. Archaeological evidence for dining comes from dining rooms and from objects related to eating or banqueting, and related entertainment. An excellent synthesis of the available evidence and its inferences is presented by Joanita Vroom, in this volume.

Syntheses: Ellis S. P. (1997) "Late-antique dining: architecture, furnishings and behaviour", in *Domestic Space in the Roman World: Pompeii and Beyond*, edd. R. Laurence and A. Wallace-Hadrill (JRA Suppl. Ser. 22) (Portsmouth, R. I. 1997) 41–51. Slater W. J. (1991) *Dining in a Classical Context* (Ann Arbor 1991). Blanc N. and Nercessian A. (1992) *La cuisine romaine antique* (Grenoble 1992). Gold B. K. and Donahue J. F. (2003) edd. *Roman Dining. A Special Issue of American Journal of Philology* (Baltimore 2005). Mayer W. and Trzcionka S. (2005) edd. *Feast, Fast or Famine: Food and Drink in Byzantium* (Brisbane 2005) 11–24. Brubaker L. and Linardou K. (2007) edd. *Eat, Drink and be Merry: Food and Wine in Byzantium* (Birmingham 2007). Rossiter J. (1991) "Convivium and villa in Late Antiquity", in *Dining in a Classical Context*, ed. W. J. Slater (Ann Arbor 1991) 199–214. Roberts M. (1995) "Martin meets Maximus: the meaning of a Late Roman banquet", *Revue des études augustiniennes* 41 (1995) 91–111. Neyrey J. (1991) "Ceremonies in Luke-Acts: the case of meals and table-fellowship", in *The Social World of Luke-Acts: Models for Interpretation*, ed. J. H. Neyrey (Peabody 1991) 361–87. Nielsen I. and Nielsen H. (1998) edd. *Meals in a Social Context: Aspects of the Communal Meal in the Hellenistic and Roman World* (Oxford 1998). Bek L. (1983) "Quaestiones convivales: the idea of the triclinium and the staging of convivial ceremony from Rome to Byzantium", *AnalRom* 12 (1983) 81–107. D'Arms J. (1984) "Control, companionship, and clientele: some social functions of the Roman communal meal", *EchCl* 28 (1984) 327–48. D'Arms J. (1999) "Performing culture. Roman spectacle and the banquets of the powerful", in *The Art of Ancient Spectacle*, edd. B. Bergmann and C. Kondoleon (Studies in the History of Art 56) (New Haven 1999) 301–19.

Architecture, dining rooms/halls by region: *Italy*: Ling R. (1995) "The decoration of Roman triclinia", in *In vino veritas*, edd. O. Murray and M. Tecusan (Oxford 1995) 239–51. De Angelis D'Ossat G. (1973) "Sulla distrutta aula dei Quinque Accubita a Ravenna", *Corso di cultura sull'arte Ravennate e Bizantina* 20 (1973) 263–73. *Africa*: Lassus J. (1971) "La salle à sept absides de Djemila-Cuicul", *AntAfr* 5 (1971) 193–207. *Greece and the Balkans*: Mylonas P. (1987) "La trapéza de la Grande Lavra au Mont Athos", *CahArch* 35 (1987) 143–57. *Asia Minor*: Guilland R. (1962–63) "Études sur le grand palais de Constantinople: les XIX lits", *JÖBG* 11–12 (1962–63) 85–113. Krautheimer

R. (1966) "Die Decanneacubita in Konstantinopel: ein kleiner Beitrag zur Frage Rom und Byzanz", in *Tortulae*, ed. W. N. Schumacher (1966) 195–99. Near East: Donnay-Rocmans C. and Donnay G. (1984) "La maison du cerf", in *Apamée de Syrie: bilan de recherches archéologiques 1973–1979. Aspects de l'architecture domestique d'Apamée*, ed. J. Balty (Fouilles d'Apamée de Syrie Miscellanea 13) (Brussels 1984) 155–80. Balty J. and Balty J. (1995) "Nouveaux exemples de salles à stibadium à Palmyre et à Apamée", in *Orbis romanus christianusque: ab Diocletiani aetate usque ad Heraclium. Travaux sur l'Antiquité Tardive rassemblés autour des recherches de Noël Duval*, ed. N. Duval (Paris 1995) 207–12. Morvillez E. (1995) "Les salles de réception triconques dans l'architecture domestique de l'antiquité tardive en Occident", *Histoire de l'art* 31 (1995) 15–26.

Fixtures: Morvillez E. (1996) "Sur les installations de lits de repas en sigma dans l'architecture du Haut et du Bas-Empire", *Pallas* 44 (1996) 119–58. Dunbabin K. M. D. (1991) "Triclinium and stibadium", in *Dining in a Classical Context*, ed. W. J. Slater (Ann Arbor 1991) 121–48. See further references in thematic bibliographic essay of Utteryhoeven, cited above.

Functional artefact studies: Knudsen S. (2000) "Dining as a fine art. The tablewares of the Ancient Romans", in *Antioch. The Lost Ancient City*, ed. C. Kondoleon (Princeton 2000) 181–95. See paper in this volume by Vroom, with further references.

Depictions: Driven L. (2005) "Banquets scenes from Hatra", *ARAM Periodical* 17 (2005) 61–82. Dunbabin K. M. D. (2003a) "The waiting servant in later Roman art", *AJP* 124 (2003) 443–68. Dunbabin K. M. D. (2003b) *The Roman Banquet. Images of Conviviality* (Cambridge 2003). Dunbabin K. M. D. (1996) "Convivial spaces: dining and entertainment in the Roman villa", *JRA* 9 (1996) 66–80. Dunbabin K. M. D. (1995) "Scenes from the Roman *convivium*: *Frigida non derit, non derit calda petenti* (Martial xiv. 105)", in *In vino veritas*, edd. O. Murray and M. Tecusan (Oxford 1995) 252–65. Dunbabin K. M. D. (1993) "Wine and Water at the Roman Convivium", *JRA* 6 (1993) 116–41. Wallace-Hadrill A. (2004) "Imaginary feasts: pictures of success on the Bay of Naples", *Ostia, Cicero, Gamala, Feasts and the Economy. Papers in memory of John H. D'Arms*, edd. A. Gallina Zevi and J. H. Humphrey (JRA Suppl. Ser. 57) (Portsmouth, R. I. 2004) 109–26.

Literary sources, selected: Grimm V. (1996) *From Feasting to Fasting, the Evolution of a Sin: Attitudes to Food in Late Antiquity* (London and New York 1996).

Reception

The reception of guests was a formal and ceremonial event, which took place within the house and required a specific domestic setting. Apart from textual sources, most evidence for the reception of guests is to be found in the large reception halls which were incorporated into the houses of the elite during Late Antiquity. The architectural setting and decoration of these reception halls demonstrates the importance attached to the reception of clients/guests in this period. Occasionally,

plans and decoration offer clues to the way in which ceremony was organised. Iconographic depictions of audiences are many, ranging from depictions of emperors to biblical figures etc.

Syntheses: Scott S. (1997) "The power of images in the Late-Roman house", in *Domestic Space in the Roman World: Pompeii and Beyond*, edd. R. Laurence and A. Wallace-Hadrill (JRA Suppl. Series 22) (Portsmouth, R. I. 1997) 53–67. Constable O. R. (2003) *Housing the Stranger in the Mediterranean World. Lodging, Trade and Travel in Late Antiquity and the Middle Ages* (Cambridge 2003). Cutler A. (2001) "Gifts and gift exchange as aspects of Byzantine, Arab, and related economies", *DOP* 55 (2001) 247–78. Malmberg S. (2005) "Visualising hierarchy at imperial banquets", in *Feast, Fast or Famine: Food and Drink in Byzantium*, edd. W. Mayer and S. Trzcionka (Brisbane 2005) 11–24. Ellis S. (1991) "Power, architecture, and décor: how the Late Roman aristocrat appeared to his guests", in *Roman Art in the Private Sphere: New Perspectives on the Architecture and Decor of the Domus, Villa, and Insula*, ed. E. K. Gazda (Ann Arbor 1991) 117–40. On petition, and on the contexts for audience rituals see Feissel D., Gascou J. (2004) *La pétition à Byzance* (Centre de Recherche d'Histoire et Civilisation de Byzance, Monographies 14) (Paris 2004).

Depictions: For the iconography of audience scenes and references to representations see Slavazzi F., Gemma S. C. (1999) "La capsella argentea di San Nazaro. Primi risultati di una nuova indagine," *AnTard* 7 (1999) 187–204, particularly 191–93.

Cooking

Apart from Pompeii, kitchens are not easily distinguishable in Roman houses. Some aristocratic houses had a separate kitchen identifiable from the presence of ovens and benches/counters, but generally no (semi-)structural features are encountered that positively identify a room as a kitchen. The absence of such features has led to the suggestion that most urban dwellers bought hot meals from nearby bars or restaurants. In most households, however, cooking probably took place on small portable braziers of bronze or pottery in the courtyard of the house. Material related to cooking activity such as kitchen wares (cooking pots, mortaria, frying pans etc) and metal implements such as knives are frequently found in domestic contexts.

Archaeological sites, by region: *Italy:* Foss P. (1997) "Watchful Lares: Roman household organization and the rituals of cooking and dining", in *Domestic Space in the Roman World. Pompeii and Beyond*, edd. R. Laurence and A. Wallace-Hadrill (JRA Suppl. Ser. 22) (Portsmouth, R. I. 1997) 197–218. Foss P. (1994) *Kitchens and Dining Rooms at Pompeii. The Spatial and Social Relationship of Cooking and Eating in the Roman Household* (Ph.D. diss. Univ. of Michigan 1994). Salza

Prina Ricotti E. (1978–80) "Cucine e quartieri servili in epoca Romana", *RendPontAcc* 51–52 (1978–80) 247–49.

Functional artefact studies: Blanc N. and Nercessian A. (1992) *La cuisine romaine antique* (Grenoble 1992). Brokolakis Y. (2005) "Bronze vessels from Late Roman and Early Byzantine Eleutherna on Crete", *Antiquité tardive* 13 (2005) 37–50, esp. 42 for references; See articles by Mannoni, Bonifay and Arthur referring to steatite cooking dishes and ceramic cooking pots in *Technology in Transition*, *ca. A.D. 300–650*, edd. L. Lavan, E. Zanini and A. Sarantis (Late Antique Archaeology 4) (Leiden 2007). See also Yangaki An. (2005) *La céramique des IV^e–VIII^e siècles ap. J.-C. d'Eleutherna. Sa place en Crète et dans le bassin Egéen* (Athens 2005).

Sleeping

Bedrooms are difficult to identify, as we normally have no positive evidence for the presence of a bed. In addition, many bedrooms will have been situated on upper floors of which no archaeological evidence remains. Architecturally, bedrooms are generally recognised as small rooms with just enough space for one bed, normally dark, with no window, and a narrow entrance (Ellis (2000) 156–60). Little or nothing of bedroom furniture survives, but mosaics with a plain panel can indicate where a couch must have stood. Separate 'bedrooms' (or more properly reclining rooms) were probably restricted to the upper classes, as servants, slaves and ordinary people would probably have slept on straw mattresses anywhere where there was space.

The Toilet

An important ritual for women, especially the wealthy, associated with bathing in particular. We possess finds of flasks, mirrors, caskets and implements relating to this ritual, and some depictions of bathing actvities, during which some of these objects might be carried by slaves.

Syntheses: Swift E. (forthcoming) "The archaeology of adornment and the toilet in Roman Britain and Gaul" in *Dress and Identity in the Past* ed. M. Harlow (forthcoming). Warland R. (1994) "Status und Formular in der Repräsentation der spätantiken Führungsschicht", *RM* 101 (1994) 174–202. Wyke M. (1994) "Woman in the mirror: the rhetoric of adornment in the Roman world", in *Women in Ancient society*, edd. L. Archer, S. Fischler and M. Wyke (London 1994) 134–151. Kampen N. (1996) "Gender theory in Roman art", in *I Claudia: Women in Ancient Rome*, edd. D. Kleiner and S. Matheson (Austin 1996) 14–26. Lascaratos J., Tsiamis C., Lascaratos G. and Stavrianeas N. G. (2004) "The

roots of cosmetic medicine: hair cosmetics in Byzantine times (A.D. 324–1453)", *International Journal of Dermatology* 43 (2004) 397–401.

Depictions: see section on bathing in essay on social space. Elsner J. (2003) "Visualising women in late antique Rome: the Projecta Casket", in *Through a Glass Brightly: Studies in Byzantine and Medieval Art and Archaeology presented to David Buckton*, ed. C. Entwistle (Oxford 2003) 22–36.

Functional Artefact Studies: Riha E. (1986) *Römisches Toilettgerät und medizinische Instrümente aus Augst und Kaiseraugst* (Forschungen in Augst 6) (Augst 1986).

Children's Play

Toys survive well from Egypt, from graves and settlement contexts. Rarely mentioned by literary sources, their study is not well advanced, although in their character they seem quite similar to toys known from other periods.

Syntheses: For toys see Pitarkis B. (2006) "Material culture of childhood in Byzantium", paper given at the *Dumbarton Oaks Spring Symposium 2006* (forthcoming in *DOP*). See especially *Les Dossiers de l'Archéologie* 168 (1992), a special edition on children's games and toys ("*Jeux et jouets dans l'Antiquité et le Moyen Age*") including articles such as: A. Durand, "Jeux et jouets de l'enfance en Grèce et à Rome" (10–17); R. May, "Les jeux de table dans l'Antiquité" (18–35); J. M. André, "Jeux et divertissements dans le monde gréco-romain" (36–45); F. Poplin, "Les jeux d'osselets antiques" (46–47); M. Manson, "Les poupées antiques" (48–57). Johann H. T. (1976) *Erziehung und Bildung in der heidnischen und christlichen Antike* (Darmstadt 1976). Kastner M.-O. (1995) "L'enfant et les jeux dans les documents d'époque romaine", *BAssBudé* (1995) 85–100. Kunst C. (2006) "Kindheit und Jugend: Spätantike", in *Handbuch der Erziehung und Bildung in derAntike Kunst*, edd. J. Christes, R. Klein und C. Lüth (Darmstadt 2006) 47–57. Manson M. (1975) "Le droit de jouer pour les enfants grecs et romains", *Recueils de la société Jean Bodin* 39 (1975) 117–50. Rouvier-Jeanlin M. (1995) "Les jouets en terre cuite de la Gaule romaine", *BAssBudé* (1995) 77–84.

Lighting

Evidence for lighting in late antique houses is derived either from the architectural setting, which can be studied for its consequences for light and lighting, using computer models, or from the archaeological evidence of the lamps themselves, generally published in catalogues of exhibitions, but also increasingly recorded within the buildings which they lit. As a subject of some awe, lighting also occasionally figures in literary sources, and depictions, though no systematic study has been done to date.

Syntheses: Ellis S. P. (1994) "Lighting in Late Roman houses", in *TRAC 94. Proceedings of the Fourth Annual Theoretical Roman Archaeology Conference. Held at the Department of Archaeology, University of Durham, 19th and 20th March 1994*, edd. S. Cottam, D. Dungworth, S. Scott and J. Taylor (Oxford 1994) 64–71. Ellis S. P. (2007) "Shedding light on Roman housing", in *Housing in Late Antiquity, from Palaces to Shops*, edd. L. Lavan, L. Özgenel and A. Sarantis (Late Antique Archaeology 3.2) (Leiden 2007) 283–302.

Functional artefact studies: Bouras L. (1982) "Byzantine lighting devices", *JÖBG* 32.3 (1982) 479–91. Nesbitt J. W. (1988) *Byzantium. The Light in the Age of Darkness* (New York 1988).

Religion/Magic

Religion and superstition always had their place in daily life and in houses. Evidence for this comes in the shape of shrines, niches and other specific places constructed for worship, or in the form of small artefacts which had a religious meaning such as crosses, amulets, bells etc. The significance of items like this in a late antique domestic context is examined by Mitchell in the present volume.

Syntheses: Maguire H. (1995) ed. *Byzantine Magic* (Washington D.C. 1995). Russell J. (1995) "The archaeological context of magic in the Early Byzantine period", in *Byzantine Magic*, ed. H. Maguire (Washington D.C. 1995) 35–50.

Archaeological sites: Bakker J. Th. (1994) *Living and Working with the Gods. Studies of Evidence for Private Religion and its Material Environment in the City of Ostia (100–500 AD)* (Dutch Monographs on Ancient History and Archaeology 12) (Amsterdam 1994). Foss P. W. (1997) "Watchful Lares. Roman household organization and the rituals of cooking and eating", in *Domestic Space in the Roman World: Pompeii and Beyond*, edd. R. Laurence and A. Wallace-Hadrill (JRA Suppl. Ser. 22) (Portsmouth, R. I. 1997) 196–218.

Dress And Personal Space

Dress and personal objects (and jewellery) carried with an individual make up the most stable objects configurations in any person's life. Reconstructions of dress depend on several different types of source material, none without problems. Grave contexts are particularly important, as they are the most widely distributed category of evidence, are often undisturbed contexts, and have the potential to show us actual dress habits rather than the idealised versions that we tend to see on grave monuments and other visual sources. In Late Antiquity, there was an increasing trend towards dressed burial, for example at military

sites along the Western frontier, and this together with the switch to inhumation burial in the later Roman period makes graves a strong source of evidence for dress in this period. While textile survivals are quite rare in burial contexts (with the exception of Egypt), in cases of dressed burial, it is sometimes possible to reconstruct elements of costume represented by dress accessories, for example, a single brooch on the shoulder may represent a cloak (common in military cemeteries) while two brooches, one on either shoulder, in a female burial, suggest a 'peplos' type costume (which has sometimes been associated with Germanic identity in the period). Belt buckles, hobnails, etc. can be similarly informative.

However, grave contexts can still be problematic, in that they usually represent the way in which communities chose to present an individual—the construction of a particular, and perhaps ideal, identity at death. There may also have been specific ways of dressing the body at burial appropriate to the funerary context which may not reflect lifetime habits of dress. In addition, personal ornaments accompanying a burial may represent items felt to be disposable, with more valuable ones perhaps being inherited by others. In some particular instances, a case can be made that an assemblage of personal ornaments reflects with reasonable accuracy elements of the costume worn in daily life. Sometimes on late antique sites burial appears to be the hasty disposal of bodies rather than an end-product of a sequence of ritual behaviour. An example from Canterbury consists of a multiple pit burial within the city walls of the Late Roman town. In this instance, it can be suggested that dress items worn at burial represented dress in life, rather than a carefully assembled 'burial costume'. Disaster deposits that include human remains also have the potential to be informative in this respect. If these types of contexts produce a similar range, combination and position of dress items compared to burials in cemeteries, it becomes possible to suggest that dressed burial in these cemeteries does represent everyday costume fairly well.

Grave contexts are also subject to considerable bias in the types of graves that survive. As burial with objects becomes less common in the fifth century and later at some types of sites, evidence is skewed towards fourth century material or particular cemeteries where dressed burial continues in the post-Roman phase. Evidence is often lacking for the very rich (Childeric's grave being a notable exception here), or the very poor, whose status has either attracted post-burial robbers, or resulted in an anonymous, perhaps impermanent burial.

All these factors make it necessary to consider evidence from depictions, in mosaics, wall paintings, manuscripts, silver plate, ivory and reliefs from sarcophagi or public monuments. But these too filter out the poorest, and represent their subjects according to acceptable genres and representational purpose. This makes some consideration of textual sources also significant: this can provide glimpses not only of official dress codes, but also of items people actually wore in precise historical situations, whilst patristic writers describe images of the poor that, for all their rhetoric, are useful in clothing this otherwise invisible class. A combination of multiple types of evidence is obviously useful where possible.

Variability in survival and recovery of evidence means that reconstructions of regional variation in dress are possible for some areas, but not for others (e.g. Spain). Sometimes the types of evidence found in adjacent regions is entirely different: some have graves, whilst others have only sarcophagi, others only mosaics, or actual textiles, or textual descriptions of the poor. Certain professions are more likely to be visible than others (soldiers in graves, charioteers on mosaics, senators on court art).

Information on personal items other than dress is more limited than in the Principate. Of professional objects we have depictions of soldiers carry-packs, and of jugglers with their equipment, but no kits of doctors' instruments, as earlier. The tools of scribes are known, as they were rank symbols of some officials (e.g. Cassiodorus and *Princeps officium*). Personal equipment, e.g. knives, are sometimes found in graves of the period, and where they are found on or near the body may be indicative of equipment carried around in life; i.e., they end up in the grave because they are part of habitual dress, rather than being a specific burial good. Toilet implements and children's toys are described under the section on domestic space.

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For later Roman cooking utensils found in Egypt, see Roman Cooking Utensils in the Royal Ontario Museum of Archaeology CG Harcum—American Journal of Archaeology, 1921 and Archaeology viii (955) 8

J. W. Humphrey, J. P. Oleson, A. N. Sherwood (1998) *Greek and Roman Technology: A Sourcebook: Annotated Translations of Greek Latin Texts and Documents* (London 1998) 167–72 (section 4.27) on cooking utensils and procedures (with list of utensils from Apicius), with bibliography.

Steatite cooking vessels and cooking pots—described in LAA4 papers.

PRODUCTIVE SPACE IN LATE ANTIQUITY

Toon Putzeys

Introduction

This section concentrates on evidence for space involved in the preparation of raw materials and for large-scale manufacturing. Such activities normally took place in districts where raw materials were found, or in separate industrial quarters on the outskirts of the city. The products made in such facilities found their way to craft workers for further processing or, in the case of finished products, to merchants who sold them on to customers in local or regional markets.

Centres of Production

Pottery production centres

Whilst little or no evidence exists for shops selling ceramic vessels, a large body of production sites for pottery is documented from all over the Mediterranean. People might have bought their ceramics directly from potters' workshops or from stalls set up on temporary markets. The structural remains of pottery production centres such as kilns and rooms for the processing of the clay are in most cases well-preserved and clearly identifiable. Artefactual evidence for pottery production consists of (misfired) pottery, kiln spacers and moulds, etc. Due to the large body of material, only a selection of pottery manufacturing centres, with material relevant to Late Antiquity, are listed here.

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Glass production centres (primary production)

As indicated earlier, the glass industry was divided into two separate branches: one concerned with making the raw material (primary production), the other with crafting it into objects (secondary production). The production of the raw glass took place in the countryside, close to the location of the raw materials (Foy and Nenna (2001) 35–39). Recent analyses of Roman glass from different areas have shown that its chemical composition is remarkably uniform, suggesting a limited number of sources of raw materials. This information, along with the fact that ancient literary sources only mention 5 areas of glassmaking, supports the generally accepted hypothesis that the number of the primary workshops was very limited, though it must be noted that most of these literary sources date to the 1st c. A.D. (Stern (2004) 96–97; Stern (1999) 454). The most important regions for the preparation of raw glass during the Roman and Early Byzantine periods were Egypt and the coast of Syria/Palestine.

Installations for the production of raw glass have been found in Israel at Beit Eli'ezer (8 km south of Caesarea) where 16 single use glass kilns with twin furnaces were excavated, dated to the 7th c. A.D., each with the capacity to produce 8 to 10 tons of glass in a single firing. Evidence for primary production is only seldom attested outside the regions mentioned above. At York, for example, evidence was found for the production of raw glass linked to a military site. The presence of glass melting pots (pottery vessels that have been used as receptacles to melt glass) and partially fused glass batch material suggests that glass was being made from raw materials. In addition, glass fragments associated with glass-blowing were also retrieved from the site, indicating that the whole production process, from raw material to finished vessel, was carried out.

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Metal production centres

As was the case for the production of raw glass, the smelting of metal ores was located outside of the city. Archaeological traces of such

activities have been found; for example, the presence of smithing hearths (e.g., at Great Carison and La Ramière) or a concentration of production waste, such as slags and residues for smelting or smithing (e.g., at Sagalassos). The conversion of raw materials into metal objects usually occurred in relatively small workshops in the city (see above). However, according to literary sources, weaponry was produced on a large scale, in state owned factories. Our main source in this regard is the *Notitia Dignitatum* which lists the locations of state factories of arms, armour and parade armour, but gives us no idea of their internal spatial organisation.

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Oil / wine production

Oil and wine production is well-attested for Late Antiquity, especially in the Near East. Olives and grapes were cultivated on large estates and immediately processed into oil and wine for local, regional and interregional markets. The location of these estates and their production facilities is attested by surveys and excavations, and they are generally identified by the presence of presses and counter-weights in combination with amphorae, for the storage and transport of the wine or oil. A well-documented winery from Barcelona, dating to the second half of the 5th c. A.D., provides an idea of how such facilities were organised and of the artefacts present. The winery contained an area for obtaining the 'must', by treading, with a floor of *opus signinum* and two presses, one with a lever and a counterweight, and a smaller screw press (possibly used for a second pressing). The must was then taken via a system of drainage pipes and collected in large basins or *laci vinarium* for decanting. Afterwards, yet another channel directed the must to the fermentation rooms, where it was left to ferment uncovered in two basins. Once the open-air fermentation was complete, the wine was moved to a cellar (*cella vinaria*) for ageing and storing. The cellar was the best preserved part of the winery at Barcelona, and contained 11 dolia lined up along the walls, with a third of their body being buried below floor level. Apart from (semi-)structural features such as wine presses, counterweights, drainage systems, fermentation tanks and dolia, this winery contained a small pottery basin in which to accumulate the solid waste that remained after pressing, along with containers to store products added to the wine, and waste from a wide range of products used in the wine-making process.

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Garum/fish

In contrast to the previous categories of production sites, garum and fish processing seems to have occurred in towns frequently. Julian of Ascalon explicitly mentions the very strong and unpleasant odour from the preparation of marinade, which travels long distances and remains in the air for a long time. He advises that facilities for processing fish and the production of garum should be prohibited in towns or villages or at least located at a distance equivalent to more than 600 m from any existing building. Archaeological evidence for garum and fish factories, however, mostly comes from towns and seems to be concentrated in Spain and North Africa.

The best example of a garum production centre, which remained in use till the second half of the 5th c. A.D., is once more to be found at Barcelona. Excavations there provided an excellent idea of how a production facility for garum and salt fish functioned. The site contained well-preserved structural features such as tanks for salting the fish, and smaller troughs containing garum paste. In addition, a varied artefact assemblage related to fish processing was retrieved, consisting of hooks, needles, lead weights for fish nets, mortars and millstones, and a multitude of fish scales and bones, along with microscopic evidence for materials used for preparing the fish. Another well-known garum shop is house I.12.8 at Pompeii. This "garum shop", a renovated private house, contained facilities for making fish sauce, several dolia, which held the desiccated remains of the sauce and fish bones (primarily of anchovies), and space for retail. Although it remains possible that the entire salting process was conducted in this peristyle, it seems more likely that the sauce was produced in facilities located along the shore, and then brought here to be processed further, probably according to a particular recipe, and then distributed or sold. For North Africa, there

is evidence of garum facilities at Sabratha, where a large number of vats from private buildings on the site indicate the salting of fish.

Syntheses: Curtis R. I. (1991) *Garum and Salsamenta. Production and Commerce in Material Medica* (Studies in Ancient Medicine 3) (Leiden 1991). Curtis (2001) above 402–17. Ponsich M. and Tarradell M. (1965) *Garum et industries antiques de salaison dans la Méditerranée occidentale* (Université de Bordeaux et Casa de Vélázquez. Bibliothèque de l'école des hautes études hispaniques 35) (Paris 1965).

Archaeological sites, by region: *Spain*: Beltràn de Heredia Bercero J. (2002) "A garum and salt fish factory in Barcino", in *From Barcino to Barcinona (1st to 7th centuries): The Archaeological Remains of Plaça del Rei in Barcelona,* ed. J. Beltràn de Heredia Bercero (Barcelona 2002) 56–63. *Italy*: Curtis R. I. (1979) "The garum shop of Pompeii (I.12.8)", *CronPomp* 5 (1979) 5–23. Etienne R. and Mayet F. (1998) "Le garum a Pompei. Production et commerce", *RÉA* 100 (1998) 199–215. *Africa*: Wilson A. (2002) "Urban production in the Roman world", *BSR* 70 (2002) 231–73. Wilson A. (1999) "Commerce and industry in Roman Sabratha", *LibSt* 30 (1999) 29–52. *Egypt and Cyrenaica*: Wilson A. I. (2001) "Urban economies of late antique Cyrenaica", in *Economy and Exchange in the East Mediterranean during Late Antiquity*, edd. S. Kingsley and M. Decker (Oxford 2001) 28–43.

Quarries

The 3rd c. saw a cessation of much of the Early Imperial marble exploitation of coloured marbles. Nevertheless, some of the main quarries remained in use during Late Antiquity. Abandoned quarries can give some idea of the organisation of production through the disposition of waste and unfinished items, although they are rarely the subject of systematic exploration. Extraction activities in later periods complicate analysis, as does the scarce availability of good dating material on such sites.

Syntheses: Fant J. C. (1988) ed. *Ancient Marble Quarrying and Trade* (BAR Int. Ser. 453) (Oxford 1988). Sodini J.-P. (2002) "Marble and stoneworking in Byzantium, seventh-fifteenth centuries", in *The Economic History of Byzantium from the Seventh through the Fifteenth century*, ed. A. E. Laiou (Dumbarton Oaks Studies 39) (Washington, D.C. 2002) 129–46. Dodge H. and Ward-Perkins B. (1992) edd. *Marble in Antiquity: Collected Papers of J. B. Ward-Perkins* (London 1992). Waelkens M., Herz N. and Moens L. (1992) *Ancient Stones: Quarrying, Trade and Provenance. Interdisciplinary Studies on Stones and Stone Technology in Europe and Near East from the Prehistoric to the Early Christian Period* (Acta archaeologica Lovaniensia 4) (Leuven 1992). Waelkens M. (1990) ed. *Eeuwige steen. Van Nijl tot Rijn. Groeven en Prefabricatie* (Gent 1990). Herz N. and Waelkens M. (1988)

edd. *Classical Marble: Geochemistry, Technology, Trade* (Dordrecht 1988). Maniatis Y., Herz N. and Basiakos Y. (1995) *The Study of Marble and Other Stone used in Antiquity* (London 1995). Chamay J. (1991) *Les marbres blancs dans l'Antiquité* (Geneva 1991). Waelkens M. (1999) "Marble", in *Late Antiquity: A Guide to the Postclassical World*, edd. G. W. Bowersock, P. Brown and O. Grabar (Cambridge, MA 1999) 559–62. Dworakowska A. (1983) *Quarries in Roman Provinces* (Bibliotheca Antiqua 16) (Wrocław 1983).

Archaeological sites, by region: *Italy*: Fant J. C. (2001) "Rome's marble yards", *JRA* 14 (2001) 167–98. *Greece and the Balkans*: Asgari N. (1995) "The Proconnesian production of architectural elements in Late Antiquity based on the evidence from marble quarries", in *Constantinople and its hinterland*, edd. C. Mango and G. Dagron (Aldershot 1995) 263–88. Sodini J.-P., Lambraki A. and Kozelj T. (1980) *Aliki I: Les carrières de marbre à l'époque paléochretienne* (Paris 1980). Lambraki A. (1978) *Les roches vertes. Étude sur les marbres de la grèce exploités aus époques romaine et paléochrétienne* (Paris 1978). *Asia Minor*: Monna D. and Pensabene P. (1977) *Marmi dell' Asia Minore* (Rome 1977).

Functional artefact studies: see Adam J. P. (1984) *La construction romaine: materiaux et techniques* (Paris 1984).

Depictions: Bodnar E. W. (1973) "A quarry relief on the Island of Paros", *Archaeology* 26 (1973) 270–77.

Construction sites

Construction sites represent a type of 'workshop' that is often ignored. Like any productive space they include standardised activity patterns and their own object spatiality, of professional tools and work in progress. Though usually ignored in literary sources, they can be studied from occasional depictions, such as in the *Vergilius Vaticanus* (early 5th c.), and the frescos of the hypogeum of Trebius Justus on the Via Latina, in Rome (mid-4th c.): the former shows cranes, treadmills and stonemasons at work, whilst the latter shows scaffolding and bricklayers. Very rarely building sites are preserved, where construction has been suddenly abandoned, as was the case at Pompeii; this also occurred in a late antique context at Corinth (4th c.) and at Sagalassos (early 7th c.). It is also possible to glean something of the organisation of work from an analysis of the buildings themselves, a technique which has been used effectively by Janet DeLaine for the Early Imperial period, but which has not yet really been applied to Late Antiquity.

Analysis of building techniques: Adam J. P. (1984) *La construction romaine: materiaux et techniques* (Paris 1984). De Laine J. (2001) "Techniques et industrie de la construction à Ostie," in *Ostia. Port et porte de la Rome*, ed. J.-P. Descoeudres (Geneva 2001) 91–99. DeLaine J. (2000) "Building the Eternal City: the building industry of imperial Rome", in *Ancient Rome: the Archaeology of the Eternal City*,

edd. J. Coulston and H. Dodge (2000) 119–41. De Laine J. (1997) *The Baths of Caracalla in Rome: A Study in the Design, Construction and Economics of large-scale Building Projects in Imperial Rome* (JRA Suppl. Ser. 25) (Portsmouth, R. I. 1997). Lancaster L. (2005) *Concrete Vaulted Construction in Imperial Rome* (Cambridge 2005). Santangeli Valenzani R. (2007) "Public and private building activity in late antique Rome", in *Technology in Transition*, *ca. A.D. 300–650*, edd. L. Lavan, E. Zanini and A. Sarantis (Late Antique Archaeology 5) (Leiden 2007).

Building sites recovered: *Corinth*: Scranton R. L. (1978) *Kenchreai. Eastern Port of Corinth, I. Topography and Architecture* (Leiden) 68–78.

Depictions: *Vergilius Vaticanus Vat. Lat.* 3225 fol. 13 (early 5th c.). Trebius Justus hypogeum (mid-4th c.): Rea R. (2004) *L'Ipogeo di Trebio Giusto sulla via Latina. Scavi e restauri* (Vatican 2004). In Ostia a relief was found depicting mason's tools; Ostia Antiquarium inv. no. 48421.

Functional artefact studies: for tools see Adam (1984) above.

Watermills

Evidence for watermills in Antiquity is both structural and textual, drawing especially on Vitruvius (Moritz (1956); (1958) 131–35). Most water-powered mills were related to villas on large estates, and could be used to produce flour, wine or oil. Among the most important watermills of Antiquity are those of Var and Barbegal, in southern Gaul. Both mills were constructed in the 2nd c. A.D. but remained in use up to the 4th c. A.D. Watermills used for grinding grain dating to Late Antiquity are known archaeologically from Rome on the Janiculum Hill, the Palatine and under the baths of Caracalla, from Britain at Ickham (Kent), from Tunesia at Chemtou and Testour, Athens, Caesarea Maritima and possibly from Nahal Tanninim on the Crocodile River, in Israel. In an imperial letter of the time of Constantine watermills appear as an important asset of the small community of Orcistus. In Gerasa and Ephesos watermills were identified constructed alongside abandoned buildings, which were used to power stone-saws (Seinge 2002; 2006).

Syntheses: Moritz L. A. (1958) *Grain Mills and Flour in Classical Antiquity* (Oxford 1958). Wikander Ö. (1992) "Water-mills in Europe: their early frequencies and diffusion", *Medieval Europe 1992. Pre-printed Papers* 3 (1992) 9–14. Wikander Ö. (2000) *Handbook of Ancient Water Technology* (Leiden 2000). Curtis (2001) 348–58. See also the brief overview of Roman watermills in Castella D. *et al.* (1994) *Moulin hydraulique gallo-romain d'Avenches "en Chaplix"* (Aventicum VI) (Lausanne 1994) 20–27.

Archaeological sites, by region: *Britain*: Simpson G. (1976) ed. *Water-Mills and Military Works on Hadrian's Wall* (Kendal 1976). Young C. J. (1981) "The Late Roman watermill at Ickham, Kent, and the Saxon shore", in *Collectanea*

Historica. Essays in Memory of Stuart Rigold, ed. A. Detsicas (Maidstone 1981) 32–40. Gaul: Brun J. P. and Borréani M. (1998) "Deux moulins hydrauliques du haut-empire romain en Narbonnaise", *Gallia* 55 (1998) 279–326. Benoit F. (1940) "L'usine de meunerie hydraulique de Barbegal (Arles)", *RA* 15/1 (1940) 19–80. Hodge A. T. (1990) "A Roman factory", *Scientific American* (November 1990) 58–64. Leveau P. (1996) "The Barbegal watermill in its environment: archaeology and the economic and social history of Antiquity", *JRA* 9 (1996) 137–53. Rome: Bell M. (1994) "An imperial flour mill on the Janiculum", in *L'Italie méridionale et le ravitaillement en blé de Rome et des centres urbains des débuts de la République jusqu'au Haut Empire. Actes du colloque international organisé par le Centre Jean Bérard et l'URA 994 du CNRS, Naples, 14–16 Février 1991* (Naples and Rome) 73–89. Wilson A. I. (2003) "Late antique water-mills on the Palatine", *BSR* 71 (2003) 85–109. Schiøler T. and Wikander Ö. (1983) "A Roman watermill in the Baths of Caracalla", *OpRom* 14.4 (1983) 47–64. Africa: Röder G. (1989) "Die Mühle am Medjerda-Fluss: High-Tech vor 1700 Jahren", *Bild der Wissenschaft* 12 (1989) 94–100. Wilson A. (1995) "Water-power in North Africa and the development of the horizontal waterwheel", *JRA* 8 (1995) 499–510. Greece and the Balkans: Parsons A. W. (1936) "A Roman watermill in the Athenian Agora", *Hesperia* 5 (1936) 70–90. Spain R. J. (1987) "The Roman watermill in the Athenian Agora: a new view on the evidence", *Hesperia* 56 (1987) 335–53. Asia minor: Vetters H. (1981) "Ephesos. Vorläufiger Grabungsbericht 1980", *AnzWien* 118 (1981) 137–68. Vetters H. (1982) "Ephesos. Vorläufiger Grabungsbericht 1981", *AnzWien* 119 (1982) 62–101. Vetters H. (1984) "Ephesos. Vorläufiger Grabungsbericht 1983", *AnzWien* 121 (1984) 209–32. Near East: Oleson J. P. (1983) "A Roman watermill on the Crocodilion River near Caesarea", *ZDPV* 100 (1983) 137–52. Schiøler T. (1989) "The watermills at the Crocodile River: a turbine mill dated to 345–380 A.D.", *PEFQ* 121 (1989) 133–43. Seigne J. (2002) "A 6th century water powered sawmill at Jarash", *ADAJ* 46 (1983) 205–13. Seigne J. (2006) "Water-powered stone saws in Late Antiquity: first step on the way to industrialisation?", in *Cura Aquarum in Ephesus*, ed. G. Wiplinger (Leuven 2006) 371–78.

Depictions: A waterwheel or perhaps a water lifting device appears in a wall painting from the Catacomb of Saint-Agnes in Rome, dating to the 3rd c. A.D. and on a 5th c. A.D. mosaic from Constantinople; see Castella *et al.* (1994) above 20.

Literary sources: Vitr. *De arch.* 10.5.2. See also Moritz L. A. (1956) "Vitruvius' watermill", *CR* 70 (1956) 193–96.

Epigraphy: Orcistus in Phrygia was proud of its watermills at the time of Constantine: Chastagnol A. (1981) "L'inscription constantinienne d'Orcistus", *MEFRA* 93 (1981) 381–416.

Storage and Transport

Warehouses

Warehouses generally contain little artefactual evidence and are identified solely on architectural grounds. The reference work in this regard is Rickman's *Roman Granaries and Store Buildings* (1971) though no synthetic treatment has yet appeared of the monumental warehouse buildings of 4th c. date, from imperial capitals or frontier cities: here just a selection is listed. It should be remembered, however, that it is the most monumental granaries with the clearest diagnostic architectural form that are generally recognised as such, whilst simpler structures could also have been used. Generally speaking the contents of such structures are rarely recovered. At Dichin, Bulgaria, a granary in a Roman fort was excavated, identified both on the basis of its structural features (especially its raised floor) and the large amount of carbonised grains. The excellent preservation of the site (see Poulter's paper in this volume) is thanks to the fact that the fort was raided and burnt to the ground in the late 5th c. Another site with a warehouse is Caesarea, where a warehouse was situated near the governor's palace. The large amount of faunal remains retrieved from this storage building indicates that it was used for butchery in its last phase, though this is not likely to represent its normal function. Apart from such items retrieved from inside warehouses, we hear from an inscription of sets of officially-approved weights used by government horrea in Lycia, at Andriake and Arneae, but no other details.

Syntheses: Rickman G. (1971) *Roman Granaries and Store buildings* (London 1971). Lavan L. (2001) *Provincial Capitals of Late Antiquity* (Ph.D. diss., Univ. of Nottingham 2001) 246–52. See also Johnson P. (2003) "Late Roman economic systems: their implication in the interpretation of social organisation", in *TRAC 2002. Proceedings of the Twelfth Annual Theoretical Roman Archaeology Conference*, edd. G. Carr, E. Swift and J. Weekes (Oxford 2003) 101–12.

Architecture, monumental urban horrea, new buildings: *Trier*: Eiden H. (1949) "Untersuchungen an den spätrömischen Horrea von St. Irminen", *TrZ* 18 (1949) 73–106; dating: ibid. 95–96. *Milan*: Mirabella Roberti M. (1984) *Milano romano* (Milan 1984) 75. Ceresa Mori A. (1983) "Milano via del Lauro 1—Via Bioti 3 Sondaggio", in *Notiziario Soprintendenza Archeologica della Lombardia* (1983 (1984)) 56–57. Lusuardi Siena S. (1990) "Horrea", in *Milano capitale dell'impero romano, 286–402 d.C.*, ed. G. Sena Chiesa (Milano 1990) 102–104. *Aquileia*: Brusin G. (1934) *Gli scavi di Aquileia* (Udine 1934) 117. Mirabella Roberti M. (1973) "Architettura civile tardoantica tra Milano e

Aquileia", *Antichità Altoadriatiche* 4 (1973) 159–70. Mirabella Roberti M. (1965) "L'edificio romano del 'Patriarcato', supposto palazzo imperiale di Aquileia", *Aquileia Nostra* 27 (1965) 47–78. Mirabella Roberti M. (1982) "Il palazzo del Patriarca di Aquileia", *Antichità Altoadriatiche* 22 (1982) 46–78. *Sirmium*: Popović V. (1971) "A survey of the topography and organisation of Sirmium in the late empire", *Sirmium* 1 (1971) 129. Boskovic D., Duval N., Gros P. and Popović V. (1974) "Recherches archéologiques à Sirmium. Campagne franco-yougoslave de 1973", *MEFRA* 86 (1974) 608–609. See the rest of this article for dating of other major buildings in Sirmium 597–656. *Serdica*: Illustration with commentary in Académie Bulgare des Sciences Institut Archéologique et Musée, *Serdica* tome 2 (Sofia 1989) 45. *Constantinople*: Mango C. (1985) *Le développement urbain de Constantinople (IV^e–VII^e siècles)* (Paris 1985) 40. Mundell-Mango M. (2000) "The commercial map of Constantinople", *DOP* 54 (2000) 189–207. *Tenedos*: Procop. *de aed.* 5.1.7–16. *Caesarea Palestinae*: Holum G., Raban A. and Patrich J. (2002) *Caesarea Papers 2: Herod's Temple, the Provincial Governor's Praetorium and Granaries, the Later Harbor, a Gold Coin Hoard and Other Studies* (JRA Suppl. Ser. 35). J. Patrich (1996) "Warehouses and granaries in Caesarea Maritima," in *Caesarea Maritima—Retrospective After two Millennia*, edd. A. Raban and K. G. Holum (Leiden 1996) 146–76.

Architecture, monumental urban horrea repairs: *Savaria*: *CIL* 3.4180 = *IDR* 1.48 = *ILS* 727. *Corinth*: IG 7.24. *Ephesus*: a grain warehouse was built by a certain Diogenes: Miltner F. (2004) "XXIV Vorläufiger Bericht über die Ausgrabungen in Ephesos", *ÖJh* 44 (1954) 279 ff. *Andriake*: Hellenkemper H. and Hild F. (2004) *Lykien und Pamphylien* (Tabula Imperii Byzantini 8) (Vienna 2004).

Inscriptions on horrea management: *Rusicade*: *CIL* 3.4180 = *ILS* 727. *Scarphia*: *IG* 7.24. *Andriake and Arneae*: Petersen E. and von Luschan F. (1889) *Reisen im Südwestlichen Kleinasien II* (Vienna 1889) 42 no. 77a.

Literary sources, selected: Cassiod. *Var.* 1.17, 9.27, 11.21. *Cod. Theod.* 15.1.4 (A.D. 326); *Cod. Theod.* 25.1.38 (A.D. 398); *Cod. Iust.* 7.10.11 (A.D. 423).

Horrea in forts: see the section on forts, including Dichin and Xatrus.

Horrea in villages: common in many regions, as they are in villas, but see especially Husselman E. M. (1952) "The Granaries of Karanis", *TAPA* 83 (1952) 56–73.

Ports

The Early Imperial era had been a major period of specialised port construction, with both maritime and riverine facilities built. Particularly enormous artificial breakwaters were built at Rome and Caesarea Maritima, drawing on a Hellenistic tradition of imposing port construction. This tradition continued on a more reduced scale in Late Antiquity, with new harbours attested at Constantinople and Anthedon in Greece, and repairs known more widely. Sean Kingsley has criticised the notion that this development represents decline, noting that many ships did

not need such generous facilities and could be offloaded in natural harbours, or by using small boats, discharging from vessels anchored at a short distance from the shore. At the larger harbours, artificial port construction could include a large artificial breakwater, designated warehouses and special ramps. Depictions of ports are limited to a single set of 4th c. painted glass images from the port of Corinth, which is perhaps strongly influenced by earlier artistic representations. Texts describe iron chains controlling the entrance of the harbour of Carthage, a lighthouse at Smyrna, and granaries at Constantinople. The great harbour of Portus was still operating on behalf of Rome in the mid-6th c. We have no idea of loading devices or specialised objects used in ports during this period, though new excavations at Constantinople may change this.

Syntheses: key work is Kingsley S. (2004) *Barbarian Seas: Late Roman to Islam* (Encyclopaedia of Underwater Archaeology 4) (London 2004) 131–59. See also Kingsley S. (2001) "Decline in the ports of Palestine in Late Antiquity", in *Recent Research in Late Antique Urbanism*, ed. L. Lavan (JRA Suppl. Ser. 42) (Portmouth, R. I. 2001) 69–87. de Caprariis F. (1999) "I porti della citta nel IV e V secolo d.C.", in *The Transformations of Urbs Roma in Late Antiquity*, ed. W. V. Harris (JRA Suppl. Series 33) (Portsmouth, R.I. 1999) 217–34.

Architecture, new building: *Ceuclum (Cuijk)*: on river Maas possible quay dated to A.D. 320–342: Goudswaard B., Kroes R. and van der Beek H. (2000) "The Late Roman bridge at Cuijk", in *Berichten van de Rijksdienst voor het Oudheidkundig Bodemonderzoek* 44 (2000) 440–560. *Tomis*: 4th c. warehouses complex: Canarache V. (date unknown) *Edificiul cu mosaic din Tomis* (date and place unknown). *Thessalonica*: (built by Constantine) Zos. 2.22.1. *Constantinople*: Harbours of Julian and Theodosius, see Mango C. (1990) *Le développement urbain de Constantinople, IV^e–VII^e siècles* (2nd ed.) (Paris 1990) 38–40. *Heraeum and Eutropius, near Constantinople*: (new) Procop. *Aed.* 1.11.18–22. *Anthedon*: (5th-6th c.) Schlager H., Blackman D. J. and Schafer J. (1968) "Der Hafen von Anthedon mit Beitragen zur Topographie und Geschichte der Stadt", *AA* 1 (1968) 21–98. *Smyrna*: (mole and lighthouse constructed) *Anth. Graec.* 9.670–71. *Marea*: Petruso K. M. and Creighton G. (1983) "Marea: a Byzantine port on Egypt's Northwestern Frontier", *Archaeology* 36 (1983) 62–77.

Architecture, repairs: *Constantinople*: see references to repairs and dredging in Janin and Mango above. *Corinth*: Feissel D. (1985) "Inscriptions du Péloponnese. Inscriptions du IV au VI siècle", *Travaux et Memoires* 9 (1985) 285. *Side*: Nollé J. (1993) *Side in Altertum. Geschichte und Zeugnisse I. IGK* (Bonn 1993) 347–51 n.43. *Seleucia Pieria*: *Expositio totius mundi et gentium* 28. Lib. *Or*. 11.263–64. *Caesarea Maritima*: Anastasian restoration described in Proc. Gaza *Panegyricus in imperatorem Anastasium* 19. Raban A. (1992) "Sebastos: the royal harbor at Caesarea Maritima. A short-lived giant", *IJNA* 21 (1992) 111–24. Raban A. (1996) "The inner harbour basin of Caesarea: archaeological evidence for its gradual demise", in *Caesarea Martima Retrospective After Two Millennia*, edd.

A. Raban and K. G. Holum (Leiden 1996) 628–68. Hohlfelder R. L. (2000) "Anastasius I, mud, and foraminifera: conflicting views of Caesarea Maritima's harbor in Late Antiquity", *BASOR* 317 (2000) 41–62.

Depictions: Scranton R. L. (1967) "Glass Pictures from the Sea", *Archaeology* 20.3 (1967) 163–73. Scranton R. L. (1978) *Kenchreai. Eastern Port of Corinth, I. Topography and Architecture* (Leiden 1978) figs. 29, 80–84, 89–99, 104–19, 123–24.

Literary evidence, selected: Portus (Procop. *Goth.* 3.26.3–19, 3.15.10–12). Tenedos (Procop. *Aed.* 5.1.7). On artificial port construction: Procop *Aed.* 1.11.18–22. Proc. Gaza *Panegyricus in imperatorem Anastasium* 19.

Boats and their contents

Shipwrecks provide almost undisturbed object configurations. Beside their cargo, they generally contain a large collection of quotidian objects, ranging from naval equipment to vessels for food preparation and serving, fishing equipment, and personal possessions. The overall inventory of ships includes objects such as goblets, flasks, glass jugs and jewellery. In addition, shipwrecks yield interesting assemblages of bone from animals kept on the deck, and of botanical remains originating from the ships' provisions, both of which provide an idea of the food consumed on board. On most ships, the largest part of the cargo consists of amphorae originally containing oil, wine or fish sauce. Other primary cargoes include sets of marble architectural components, roof tiles, metal cargoes and raw materials.

The most important shipwreck excavations of Late Antiquity were conducted at Yassı Adda in Turkey between 1961 and 1969. The site contained two ships containing cargoes of amphorae and wonderful collections of small finds belonging to the ship's crew. Near Marzamemi, in south-eastern Sicily, a ship was found with 200–300 tons of prefabricated marble elements for a church, dating to the mid-6th c. Other important shipwrecks dated to the late antique period were found at Dor in Israel, in the Black Sea, Isis Skerki Bank (North Africa), and Bozburun in Turkey.

Syntheses: *Ships and boats in Late Antiquity*: Kingsley S. A. (2004) *Barbarian Seas: Late Roman to Islam* (Encyclopaedia of Underwater Archaeology 4) (London 2004), and his forthcoming paper on ships in the acts of the colloquium on *Byzantine Trade (4th–12th c.): Recent Archaeological Work. The 38th Spring Symposium of Byzantine Studies, St. John's College, Oxford, 27–29 March 2004.* See also the section on transport in Bes P. (2007) "Technology in Late Antiquity: a bibliographic essay", in *Technology in Transition, ca. A.D. 300–650*, edd. L. Lavan, E. Zanini and A. Sarantis (Late Antique Archaeology 5) (Leiden 2007).

Shipwrecks: van Doornick F. Jr. (2002) "Byzantine shipwrecks", in *The Economic History of Byzantium. From the Seventh through the Fifteenth Century*, ed. A. E. Laiou (Dumbarton Oaks Studies 39) (Washington, D.C. 2002) 900–905. Parker A. J. (1992) *Ancient Shipwrecks of the Mediterranean and the Roman Provinces* (BAR Int. Ser. 580) (Oxford 1992).

Archaeological sites, by region: *Africa*: McCann A. M. and Freed J. (1994) *Deep Water Archaeology: A Late-Roman Ship from Carthage and an Ancient Trade Route near Skerki Bank off Northwest Sicily* (JRA Suppl. Ser. 13) (Portsmouth, R. I. 1994). *Italy*: Parker (1992) above no. 782. Kapitän G. (1980) "Elementi architettonici per una basilica dal relitto navale del VI secolo di Marzamemi (Siracusa)", in *Atti del XXVII Corso di cultura ravennate e bizantina* (Ravenna 1980) 71–136. *Asia Minor*: Bass G. F. and Van Doornick F. H. (1982) *Yassı Ada. A Seventh-Century Byzantine Shipwreck*, (College Station, Texas 1982). Hocker F. M. (1998) "Bozburun Byzantine shipwreck excavation. The final campaign, 1998", *INA Quarterly* 25/4 (1998) 3–13. *Near East*: Kingsley S. and Ravah K. (1996) *The Ancient Harbour and Anchorage at Dor, Israel. Results of the Underwater Surveys, 1976–1991* (BAR Int. Ser. 626) (Oxford 1996). Kingsley S. (2005) *Shipwreck Archaeology of the Holy Land. Processes and Parameters* (London 2005).

Carts and animal transport

We have little knowledge of the contents of late antique carts. For this we are mainly dependent on images from the Early Imperial period. Late antique depictions show mainly ceremonial wagons of governors, prefects and emperors, although an oxcart with a cage is known from the Piazza Armerina mosaics, for transporting captured animals to the amphitheatre, and another for transporting grapes to be pressed from Santa Constanza in Rome. A single frieze of the arch of Constantine also shows us military donkeys laden for campaign.

Syntheses: *Roman carts*: Greene K. (1986) *The Archaeology of the Roman Economy* (London 1986). Landels J. G. (1978) *Engineering in the Ancient World* (London 1986). Röring C. (1983) *Untersuchungen zu römische Reisewagen* (Koblenz 1986).

Early Imperial depictions: Gabelmann H. (1972) "Die Typen der römischen Grabstelen am Rhein", *BJb* 172 (1972) 65–140. Freigang Y. (1997) "Die Grabmäler der gallo-römischen Kultur im Moselland. Studien zur Selbstdarstellungen einer Gesellschaft", *Jahrbuch des RGZM Mainz* 44/1 (1997) 277–440. Zinn F. (2001) "Untersuchungen zu Wagenfahrtdarstellungen auf Provinzialrömischen Grabdenkmälern", *KölnJb* 34 (2001) 141–266. Ritter S. (2002/2003) "Zur Bildsprache römischer 'Alltagsszenen': Die Mahl- und Küchenreliefs am Pfeilergrabmal von Igel", *BJb* 202/203 (2002/2003) 149–170.

Late antique depicitons: For wagons of prefects and governors: *Notitia dignitatum* and also the Vienne, Aquileia and Constantinople depictions of *adventus*, listed in the streets section. For transport of emperors and generals: Arches of Galerius, Constantine and column of Arcadius. *Other*: Amedick R. (1991)

"Die Tychen des Silberschatzes vom Esquilin und der Wagen des Praefekten von Rom", *JAC* 34 (1991) 107–114. Piazza Armerina: Carandini A., Ricci A. and de Vos M. (1982) *Filosofiana. La villa di Piazza Armerina* (Palermo. 1982). Rome, Santa Constanza: Wilpert J. (1924) *Die Römischen Mosaiken und Malereien der Kirchlichen Bauten* (Freiburg 1924) 46–58, 299–301, pl. 1–5.

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COMMERCIAL SPACE IN LATE ANTIQUITY

Toon Putzeys and Luke Lavan

Introduction

Commercial space in the ancient city involved an integration of manufacturing and retail. This did not include the preparation of raw materials and large-scale manufacturing, which normally took place outside the city centre, but rather related to finishing of the products and their retail. The latter activities involved the craftsmanship of artisans and direct interaction with the customers and took place within the city centre. A similar subdivision between semi-industrial and artisanal activities was already made in the 6th c. by Julian of Ascalon who provided a detailed description of spatial regulations governing the location of workshop activity within and outside cities. This essay will concentrate on the evidence for a number of possible activities in shops and small workshops which functioned as points of manufacture and sale in cities. A later section deals with the primary production of raw materials and large-scale enterprises.

Literary sources provide some descriptions of the commercial activities taking place in cities such as Rome, Carthage, Constantinople, Antioch, Emesa, Edessa, Beirut and Alexandria. These texts illustrate the daily life in the city, including the production and/or retail of goods, describing the objects involved and the people in the process of using them. Such texts help us to understand the socio-economic and socio-spatial role of these activities. Further, there are a handful of depictions, showing artists at work, craftsmen plying their trade or merchants displaying their goods for sale. For example the border of the Yakto mosaic represents the street alive with commercial activity in 5th c. Antioch. The mosaic depicts taverns and drinking scenes, a fish seller, butchers at work, and the retail of bread. But such depictions are far fewer than the reliefs of Early Imperial tombs, from the Rhineland and elsewhere. The catacombs of Rome and those of other cities do, however, contain a wide range of depictions documenting the entire world of workers, craftsmen and shop keepers, but frequently only by the simplest iconographic representations.

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The richest class of evidence we have of workshop activity is archaeological. Yet archaeological evidence for production, sale and consumption within the late antique city varies greatly in terms of quality. Structural features such as hearths, kilns and vats are easiest to recognise during excavations. As a consequence, crafts and trades that left such clearly discernable traces in the archaeological record are vastly over-represented in studies of the late antique economy. Many commercial activities, however, did not require distinctive workshop arrangements as noted by DeLaine (2005) 29. Those trades, for example, that rendered services, or only dealt with retail, needed little in the way of fixtures and fittings to ply their trade, except maybe some shelves or tables to present and store their goods. This is also apparent from Libanius where he states that 'no space is without some handicraft; but if a man gets possession of a little strip of space, it at once becomes a tailor's shop or something of that order' (Lib. *Or.* 9.254). Such shops could be composed of space that could readily be adapted for a variety of purposes, which makes it difficult to trace these activities archaeologically. In addition, it can be assumed that such stores were usually cleared of all their stock before being abandoned, leaving an empty space with little or no indication of the activities which were carried out within (MacMahon (2003) 58; Hall (2005) 139). It is only when such shops were caught by some unexpected event such as an earthquake or a fire that a building will be found fully stocked. Such rich deposits, however, are exceptional, making largely invisible a wide range of activities that must have taken place in shops. Often our only clue are '*topos* inscriptions' which officially designate points of trade for such services as barbers, food merchants, clerks, etc.

In most cases, the only artefacts directly related to a certain activity taking place, are abandoned (broken) tools and waste products. To identify the shop's function or its spatial organisation, these discarded artefacts should be mapped carefully and compared to the material from sites with richer deposits. Unfortunately, relevant sites with closed destruction deposits of shops, which have been excavated recently and well enough to have proper stratigraphic records, are only starting to be published. The major work here is the publication of the shops at Sardis (Crawford (1990)), which should be an example for any archaeological excavation. Shops in Scythopolis, Beirut and Justiniana Prima also contained rich deposits of artefacts belonging to Late Antiquity, but the material is not always easily accessible. The description of the shops of Scythopolis and their content by Khamis in this volume shows the

value of the material evidence. Evidence of Pompeii remains important as a parallel because of its unequalled destruction deposits. Equally important for making comparisons, is MacMahon's exhaustive work on shops in Roman Britain, which brings together structural, artefactual, pictoral and textual evidence to identify shop function.

Most shop functions can be set in any building close to a significant roadway. Nevertheless, Roman cities up to the early 7th c., possessed large numbers of purpose-built cellular units, which lined streets, often built as part of a single operation, by an owner to whom rent could be paid. These structures, labelled as *tabernae* by modern archaeologists (known as *ergasteria* in the East) frequently contain structural features that facilitate trade, such as open fronts, counters, and storage dolia; or they sometimes include some production facilities. The same units, however, have also been described as the humble residences of the poor (Hor. *Carm.* 1.4.13–14) or as shop-houses (Ellis (2000) 78–80; Ellis (2004) 47; MacMahon (2003) 70–77). Harris (2004), after re-evaluating the material from the "Early Byzantine shops" at Sardis, concluded that most of them served as private residences rather than as (work)shops. This might be valid for the final early 7th c. phase to which the finds relate, though it still likely on the basis of their form that they were built for retail. The use of such units as dwellings is attested by Ulpian (*Dig.* 50.16.183), Libanius (Lib. *Or.* 33.6) and by Leontius (*v. Sym.* 4.146), the latter definitively involving people using the shop for trade. However, this does not mean that all traders lived in their shops. Libanius, for example, definitely did not live in the shop in which he used to hold a school (Lib. *Ep.* 1.101–104). In addition, craft workers and traders of high value goods, such as silversmiths and jewellers, could have had a larger house elsewhere in the city, as was probably the case for the glass worker/jeweller studied at Alexandria. Such wealthy "business-men" probably delegated a servant to sleep in their workshops in order to protect their precious goods and tools. This means that it simply is not possible to draw a sharp line between zones for commercial activity and living space. Even in one-roomed enterprises, areas must have been used for displaying items for sale, for providing a workspace, for the storage of raw materials, and even for living space. These areas, however, are impossible to distinguish, as they were altered according to the needs of the moment.

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Glass Workshops

According to literary sources, workshops for working and shaping glass were prohibited in towns due to the severe danger of fire. If they had to be located in the town, they were to be sited in an uninhabited area

(Hakim (2001) 12). Archaeological evidence, however, proves that these guidelines were not always followed. Glass workshops were, it has to be admitted, usually located in separate industrial areas on the edge of the town (Stern (1999) 458). Yet, especially in the East, small-scale kilns associated with refuse from glassmaking are frequently found within the city centre, as at Scythopolis, Beirut, Ephesus, Aphrodisias, Delphi, Rome and Ostia (Gorin-Rosen (1998); Foy (2000); Czurda-Ruth (2004); Smith and Raté (1998) 238; Déroche and Pétridis (1993); Sagui (2000) 203–205; Rottloff (2000)). In addition, in his account of the *Life of Symeon the Fool*, Leontius of Neapolis mentions that Symeon, together with other paupers, warmed himself near a glassblowers' furnace within the town centre of Emesa.

Unlike other industries associated with fire, such as pottery and metal-working, glass-working did not develop large-scale enterprises (Stern (2004) 100–102; Stern (1999) 454–56). The physical restrictions imposed by the size and design of the ancient glass-working furnace restricted the number of persons who could work simultaneously in one shop. Urban workshops often appear to have functioned in confined spaces, generally operating only one furnace at a time (Price (2005) 171–72). Depictions of such glass workshops with a glassblower in front of a horizontal furnace were encountered on Early Imperial clay oil-lamps in Asseria (Dalmatia) and Ferrara (Baldoni (1987)), but also on later pieces as, for example, on a late 4th–early 5th c. lamp fragment from Cartago (Caron and Lavoie (1997). The restrictions imposed by the size of the workshops affected the organisation of the industry, which despite its limited scale succeeded in producing a formidable output. This level of production could only be reached thanks to the improvements to tools and equipment made during the Roman period. Unfortunately, specific tools used for glassmaking such as blowpipes, rods or shears are seldom found in archaeological contexts. The study of depictions of glassblower's tools, hoards of such tools from the Roman period, and experimental archaeology, however, provide a good idea of which implements were used, and how they were used for making glass vessels (Stern (2002)).

The fact that glass-blowing was done in workshops within the city and on a limited scale, might reflect the need for immediate interaction with the client and the production of glass vessels on demand. A picture of a glass seller's shop depicted in the Sousse catacombs, however, shows a glass seller behind a counter full of glasswares, which indicates that the process of production was separated from the sale

of finished products in some places. Although local workshops must have been present in most cities during the Late Roman and Early Byzantine period to supply the daily needs of glass vessels, glass oil lamps and windows (Gorin-Rosen (2000) 63), there is little evidence for retail of glass vessels themselves (Price (2005) 179). In most cases, glass workshops were thoroughly emptied at the time of abandonment, because of the inherent value of glass, which even if broken, could easily be recycled (Keller (2004); Stern (1999) 464, 467). In addition, it is not known for certain whether retail outlets really specialised in glass, or stocked glass with other goods and whether most glass vessels were sold in permanent shops, in stalls on town markets or directly from workshops. Probably, the consumption of the populations of the large cities required the continuous production and retail of glass, but in smaller towns it is more likely that demand for glass was met by travelling glassworkers or merchants (Price (2005) 185).

Although the identification of shops for the retail of glass is problematic, a few late antique structures could be interpreted as such. At Sardis, a glass-seller's shop was identified dating to the 6th c. A.D. (rooms E12 and E13). The shop contained an unusual concentration of broken vessel glass and window panes, and appears to have been used either to store stock or broken glass for recycling or, more probably, to sell ordinary glass products. At Scythopolis a space for glass retail was identified on one of the main thoroughfares of the city. The glass shop was part of a complex with three 6th–early 7th c. A.D. workshops with installations for glass production. The shop contained numerous glass vessels, many of them intact, found in concentrations along the walls or in the room as if they had been stored on shelves, racks or in baskets. At Beirut a 7th c. A.D. workshop with furnace was found, containing broken vessels for retail, beside a concentration of production waste.

Despite the fact that archaeological evidence of glass production and retail in Antiquity is fragmentary, a rather large number of glass workshops have been excavated with small-scale furnaces for secondary production and with refuse deposits of glass production waste, glass cullets, trails, crucible fragments and deformed vessels (Foy and Nenna (2001) 40–66; Amrein (2001) 99–125 for secondary glass production centres). The glass workshop excavated in Alexandria (Kom-el-Dikka) deserves special mention. This glass workshop with a kiln and fragments of unprocessed glass was situated alongside one of the main streets of the city and functioned as an annexe to the businesses carried out in a house across the street. The house itself served as the residence and

the office of the craft worker and was provided with a showroom for customers, a workshop in semi-precious gemstones, a workshop for the finishing of glass products, and an 'office'. The whole complex was dated to the 6th c. A.D., and proves that successful craft workers could own large private residences in the city centre.

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Metal Workshops

Workshops which created and sold finished metal objects must have been present in almost every late antique settlement. They consisted of foundries, blacksmiths and goldsmiths. Foundries were workshops where metal was melted and cast into shape. Foundries can be identified in the archaeological record by the presence of broken moulds, as at Kherson on the Crimea, or, as was the case in Scythopolis, by the presence of a storage room with broken bronze objects gathered for re-melting. Blacksmiths create metal objects by 'forging', i.e., by heating the metal in a furnace until the metal becomes soft enough to be shaped by hammering, bending or cutting in its non-liquid form. Some

depictions of blacksmiths are available—especially from Early Imperial funerary monuments such as the sepulchral altar of L. Cornelius Atimetus—but blacksmith workshops with furnaces and tools are rarely attested archaeologically.

One well-published exception is the 1st c. A.D. blacksmith's workshop of Bibractè in Gaul, where it was possible to reconstruct the organisation of the workshop on the basis of the finds. The workshop contained hearths and artefacts ranging from production waste and half-finished products to iron blacksmith's tools such as hammers, files and tongs. A replica of the workshop was made in the museum of Bibractè, Mont Beuvray. Late antique blacksmiths' workshops with well-preserved contexts were encountered at Justinia Prima, Carthage, and Scythopolis. Occasionally, blacksmiths' tools including tongs, punches, hammers, anvils and furnace bars, have been found in hoards, generally in combination with iron tools for other trades such as agriculture, carpentry, leather-working and masonry (See especially Gaspari, Gustin, Lazar, and Zbona Trkman (2000) which also contains a list of similar hoards with related bibliography). The waterlogged layers of the Walbrook stream, that ran through the centre of Roman London, contained numerous tools in an excellent state of preservation (Merrifield (1995) 27–44) whilst iron-working hoards are also known elsewhere in Roman Britain (Manning (1972)).These artefact assemblages not only provide a good idea of the content of a blacksmiths' workshop but also of the working tools used for other crafts. Goldsmiths, specialised in working with precious metals, make up a completely different category of metal workers. Gold-working was only carried out systematically in the larger cities and left little direct evidence in the archaeological record, because of the high value of the products.

Due to the danger of fire, the law legislated that metal workshops should be located in an artisanal quarter at the border of the city. The treatise of Julian of Ascalon states for example that the 'makers of axes and sickles' (blacksmiths) are only allowed in the uninhabited areas of towns (Hakim (2001) 12). As a consequence, it was suggested that in late antique cities, the production of metal objects and their retail was separated. At Sardis, Crawford identified a hardware store (rooms E9–E11) in which only storage and retail took place, but no smithing activities. The shop contained a varied stock of hardware, ranging from tools such as billhooks, a cultivating fork, hammer-adzes, and a smith's set, to household implements and personal objects, such as a pan scraper and a ladle, and belt buckles. Especially remarkable

was the abundance of locks and lock-plates indicating that the store might have specialised in the sale, and perhaps repair, of them. The absence of any evidence for casting or forging, led Crawford to suggest that the production of metal goods was separated from their retail, being confined to the outskirts or suburbs of the city, out of fear of fire in the heavily-populated commercial centre. In several towns, however, there is archaeological evidence for metal processing within the commercial centre e.g., at Segobriga, Sagalassos and Scythopolis, which shows that production and retail were not always separated. In addition, direct interaction between artisan and client must sometimes have been necessary, to allow custom-made products.

In general, however, little direct evidence of smithing activities can be found and the only indication of iron-working available is the presence of production waste such as hammer-scale flakes. Quantification of this production debris can then be used to reconstruct the type of smithing activity taking place, such as the production of complete artefacts or the repair of broken objects (Serneels (2003)). As was the case with glass workshops, metal stores which were abandoned were normally thoroughly depleted, because of the intrinsic value of the material: see Ballet, Cordier and Dieudonné-Glad (2003), for the recycling of scrap and sheet metal in urban contexts. The same is true on a higher level for goldsmiths and silversmiths, which makes this category of workshop almost invisible. Only under very specific circumstances, with sudden destruction, is the content of a jeweller's shop sealed, and can be identified as such, as at Scythopolis. Overall, the range of metal objects produced in Late Antiquity is better known from hoards, graves, shipwrecks and a few well-preserved occupation deposits, than from the content of metalware workshops. This is well illustrated by Mundell-Mango (2000) who presents a good idea of the range of copper artefacts produced between the 5th and 7th c. A.D.

Syntheses: Mundell-Mango M. (2001) "Beyond the amphora: non-ceramic evidence for late antique industry and trade", in *Economy and Exchange in the East Mediterranean during Late Antiquity. Proceedings of a Conference at Somerville College, Oxford, 29th May, 1999,* edd. S. Kingsley and M. Decker (Oxford 2001) 87–106. Ballet P., Cordier P. and Dieudonné-Glad N. (2003) *La ville et ses déchets dans le monde romain. Rebuts et recyclages. Actes du colloque de Poitiers (19–21 Septembre 2002)* (Montagnac 2003). Burkhalter F. (1998) "La production des objets en métal (or, argent, bronze) en Égypte héllenistique et romain à travers les sources papyrologiques", in *Commerce et artisanat dans l'Alexandrie hellénistique et romaine. Actes du Colloque d'Athènes, déc. 1988*, ed. J.-Y. Empereur (BCH suppl. 33) (Paris 1998) 125–33.

Archaeological sites with important stratigraphy, by region: *Gaul*: Duvauchelle A. (1999) "Un atelier de métallurgie du plomb du Bas-Empire à Avenches", *Bulletin de l'Association Pro Aventico* 41 (1999) 133–46. Pernot M. (1998) "Des ateliers métallurgiques près de la Porte du Rebout", in "L'oppidum de Bibracte. Un bilan de onze années de recherche (1984–1995)", *Gallia* 55 (1998) 52–60. Serneels V. (2003) "10 Années de recherches archéometallurgiques en Suisse", *HelvArch* 131–32 (2003) 100–10. Serneels V. (2005) *Smithing Slags from Roman Archaeological Sites of Switzerland and their Significance. 35th International Symposium on Archaeometry 3–7 May 2004 Zaragoza (Spain)* (Saragossa 2005). Anderson T. J., Agustoni C., Duvauchelle A., Serneels V. and Castella D. (2003) *Des artisans à la campagne. Carrière de meules, forge et voie gallo-romaine à Châbles (FR)* (Archéologie fribourgeoise) (Fribourg 2003). *Spain*: A metal workshop was identified in one of the tabernae on the south side of the forum of Segobriga: poster *Foro Romano de Segobriga* bought on site November 2000. *Africa*: Hurst H. R. (1994) *Excavations at Carthage: The British Mission. 2: The Circular Harbour, North side. 1: The Site and Finds other than Pottery* (British Academy Monographs in Archaeology 4) (Oxford 1994). *Greece and the Balkans*: Popovič C. (1990) "Les activités professionnelles à Caričin Grad vers la fin de V^{e} et le début du VII^{e} siècle d'après les outils de fer", in *Caričin Grad 2: Le quartier sud-ouest de la ville haute*, edd. B. Bavant, Lj. Bjelajac and V. Ivanisevic (CÉFR 75) (Rome and Belgrade 1990). *Asia Minor*: Botoli A. and Kazanski M. (2002) "Kherson and its region", in *The Economic History of Byzantium from the Seventh through the Fifteenth century*, ed. A. E. Laiou (Dumbarton Oaks Studies 39) (Washington, D.C. 2002) 659–65. Kellens N., Degryse P., Muchez P., Naud J. and Waelkens M. (2003) "Iron production activities and products at Roman to Early Byzantine Sagalassos (SW Turkey)", in *Archaeometry in Europe, Proceedings Vol. 1, Milan, September 24–26, Milan* (Milan 2003) 545–54. Crawford (1990) above 71–78. Waldbaum J. C. (1983) *Metalwork from Sardis: The Finds through 1974* (SardisMon 8) (Cambridge, Mass. 1983).

Functional artefact studies: Gaspari A., Gustin M., Lazar I. and Zbona Trkman B. (2000) "Late Roman tool finds from Celje, Gradisce at Zbelvoska gora and Sv. Pavel above Vrtovin (Slovenia)", in *Iron, Blacksmiths and Tools. Ancient European Crafts. Acts of the Instrumentum Conference at Podsreda (Slovenia) in April 1999*, edd. M. Feugère and M. Gustin (Monographiae Instrumentum 12) (Montagnac 2000) 93–96. Merrifield R. (1995) "Roman metalwork from the Walbrook: rubbish, ritual or redundancy?", *Transactions London & Middlesex Archaeology Society* 46 (1995) 27–44. Manning W. H. (1972) "Ironworking hoards in Iron Age and Roman Britain", *Britannia* 3 (1972) 224–50. Manning W. H. (1976) "Blacksmithing", in *Roman Crafts*, edd. D. Strong and D. Brown (Cambridge 1976) 143–53. Smith H. R. B. (1966) *Blacksmiths' and Farriers' Tools at Shelburne Museum: A History of their Development from Forge to Factory* (Shelburne 1966).

Depictions: *Early imperial reliefs*: The sepulchral altar of L. Cornelius Atimetus, Rome, Vatican Museum, inv. no. 9277. A blacksmith's workshop depicted on a smith's gravestone (late 1st–early 2nd c. A.D.), museum of Aquileia. In Ostia a ceramic plate was found depiction a blacksmith's workshop (Antiquarium inv. no. 14269) and a stone relief representing the shop of a tool's merchant (Antiquarium inv. no. 14259).

Literary sources: August. **Psalm 148. 2.9.** description of a blacksmith's workshop. Chrys. ***Hom. in Ep. I ad Cor.* 4.3–4** wealth on display in silversmith's shops.

Cloth Workshops

Because textiles are only preserved under unusual conditions, most of our knowledge of cloth-working and trade in Late Antiquity originates from textual, iconographic and epigraphic sources. Unfortunately, ancient authors concentrate on the production of high value cloth, e.g., silk (see Parani in this volume), meaning that the largest part of cloth making, processing and retail remains largely invisible. Garments were a basic product. Small workshops making, colouring and washing cloth, or stalls selling it, alongside tailors to make and repair garments, are likely to have been present in all cities (Poblome (2004) 499; Lib. *Or.* 11.254). In addition, a large part of cloth production (i.e. spinning and weaving) and processing must have taken place at home as a part of the daily routine of women (Dixon (2001); Treggiari (1976)).

Most archaeological evidence for cloth workshops comes from structures containing a series of vats, a fresh water supply and an open court for drying the cloth. Such buildings are identified as workshops for washing and dyeing cloth (*fullonicae*). Literary sources indicate that these workshops not only received the cloth as it came from the loom in order to scour and smooth it, but also washed and cleaned garments which had already been worn. The clothes were washed or dyed in the tubs or vats, where they were trodden upon as shown by wall paintings in Pompeii. To separate the dirt from the clothes, different kinds of alkali were used, of which by far the most common was the urine of men and animals mixed with the water. Analysis of the content of the vats of the *fullonica* at Barcelona showed that they contained various products related to the cleaning or colouring of cloth and clothing such as urine, ash and lime, natural dye and lavender seeds for perfuming the cloth. The *Digest* (43.10.1.4) explains that after clothes had been washed, they were hung out to dry either on a separate court or in the street before the doors of the *fullonica*. If clothes had to be bleached or fumigated, they were hung after drying on a vessel of basket-work (*viminea cavea*) under which sulphur was placed in order to whiten the cloth. The use of sulphur and the offensive odour accompanying it,

meant that *fullonicae* were ideally located in isolated quarters of the city, according to Julian of Ascalon (Hakim (2001) 12).

Evidence of *fullonicae* is found all over the Mediterranean, but the most famous examples are situated in Pompeii and Ostia. Late antique sites with evidence for washing and dyeing cloths are Rome, Carthage, Barcelona, Timgad, Beirut and several sites in Cyrenaica. Except for structural features, few artefacts are generally found in these places which can directly be related to cloth-working or dyeing. Once more, the Early Byzantine shops at Sardis are a well-known exception. Many of the shops were interpreted as involved in dye-working, e.g., from the presence of basins or vats, and a supply of fresh water, or the presence of artefacts such as mortars and pestles for grinding the dye, or raw materials such as a "red-orange" material (possibly red ochre), stored in now-decayed sacks, alongside sulphur, used to soften and bleach the wool. The *fullonicae* of Barcelona and Carthage contained (apart from fixed installations) implements related to cloth making, such as loom weights, spatulas, and needles and pins, indicating that in these establishments cloth production and washing/dyeing were combined. In Tralleis, an artisanal quarter was added to the bath gymnasium complex in the 4th c. A.D. consisting of 13 workshops belonging to textile workers. The identification of these workshops was based primarily on the objects found within the area, consisting of numerous bone needles and awls along with terracotta loom weights, suggesting that these rooms were used for making cloth. A last category of (indirect) evidence for cloth-working are rubbish deposits of Murex shells, which in the eastern part of the Mediterranean, provide a means of identifying the places where dyeing in purple (derived from Murex) took place. When considered quantitatively, such deposits can give us an idea the scale of this industry (Wilson (2002)).

Syntheses: *Textile industry*: Jenkins D. (2003) ed. *The Cambridge History of Western Textiles*, 2 vols. (Cambridge 2003). Cardon D. and Feugère M. (2000) edd. *Archéologie des textiles, des origines au V^e siècle. Actes du colloque international de Lattes, oct. 1999* (Monographia Instrumentum 14) (Montagnac 2000) 247–52. Jones A. H. M. (1960) "The cloth industry under the Roman empire", *Economic History Review* 13 (1960) 183–92. Wipszycka E. (1965) *L'industrie textile dans l'Égypte romaine* (Archiwum filologiczne 9) (Wroclaw 1965). Wipszycka E. (1966) "Das Textilhandwerk und der Staat im römischen Ägypten", *ArchPF* 18 (1966) 1–22. Oikonomides N. (1986) "Silk trade and production in Byzantium from the sixth to the ninth century: the seals of the Kommerkiarioi", *DOP* 40 (1986) 33–53. *Domestic production*: Dixon S. (2001) *Reading Roman Women, Sources, Genres and Real Life* (London 2001). Treggiari S. (1976) "Jobs for women", *AJAH* 1

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Functional artefact studies: Muthesius A. (2002) "Essential processes, looms, and technical aspects of the production of silk textiles", in *The Economic History of Byzantium from the Seventh through the Fifteenth century*, ed. A. E. Laiou (Dumbarton Oaks Studies 39) (Washington D.C. 2002) 147–68.

Depictions: we have no late antique depiction. For the Augustan bas-reliefs depicting the retail of cloth, pillows and belts inside a portico, see Florence Uffizi Gallery inv. nos. 313, 315. We also have scenes of fulling activities on imperial sarcophagi such as on a Gallo-Roman fuller's tombstone at Sens (Yonne). In Pompeii there are several wall paintings of cloth processing: a felt-making scene from a wall painting outside the workshop of Verecundus (X.vii.5–7); fulling operations in the fullery of Hysaeus (VI.vii.20–21); cupids fulling in the house of the Vettii (VI.xv.1).

Sculptors' workshops

As ancient written sources provide very little information about the craft of the sculptor, most of what we know about the tools used and the objects present in a sculptor's workplace are derived from iconographic sources, from the sculptures themselves and from comparisons with modern practice (Strong and Claridge (1976) 195). The chief tools of the sculptor were the punch, the point, the claw chisel and the flat or bull-nosed chisel, all used in conjunction with an iron hammer or a wooden mallet. The drill must have been another typical instrument for a sculptor's workshop. This tool, rotated either by a bow or by an assistant with a strap, was used at all stages to speed up the work or for carving particular features of dress or hairstyles. Apart from these percussion tools, the sculptor possessed a wide range of measuring tools to lay out his work and abrasion tools to finish/smoothen the statue. Also present were statues in all stages of completion.

However, as was the case for other industries in which the raw materials kept their value because they could be recycled or re-used, workshops making statuary were likely to be thoroughly emptied after abandonment. Spare statues were collected and frequently reused to decorate other parts of the city or private houses (Pruzac (2004); Smith (1999)). This makes them largely invisible in the archaeological record. The presence of a sculptor's workshop in a city is therefore generally attested only by inscriptions, or by the recovery of pieces of partially worked statuary. In Ephesus, for example, the presence of workshops for sculpture in the 2nd c. A.D. can be attested on the basis of sculpture studies, iconographic and epigraphic evidence (Karagöz (1999)). Up to now, however, the exact location of these workshops could not be identified. The only securely identified sculptor's workshop to date has been found at Aphrodisias, which was one of the most important production centres of sculpture in Asia Minor (Rockwell (1991)).

This "sculptor's studio" must have functioned both as a shop and as a workshop. It was identified by a concentration of fragmentary and unfinished marble statues as well as by the presence of metal tools for marble carving, in a group of 5 rooms. The occupation deposits were not depleted, because of the sudden destruction of the workshop during the 4th c. A.D. An earlier example has also been claimed at Pompeii, although the identification has been contested.

Syntheses: Jockey P. (1998) "Les représentations d'artisans de la pierre dans le monde gréco-romain et leur éventuelle exploitation par l'historien", in *L'artisanat en Grèce ancienne: les artisans, les ateliers. Actes du XX^e Colloque international du CRA et du CRMMO de Lille III, Lille, 11–12 décembre 1997*, edd. F. Blondé and A. Müller (Topoi 8.2) (Paris 1998) 625–52. Pruzac M. (2004) "Recarving Roman portraits: background and methods", *AIACNews* 39–40 (2004). On line: http://www.aiac.org/Aiac_News/AiacNews39–40/prusac.html.

Archaeological sites with important stratigraphy: *Pompeii*: Ling R. (1997) *Insula of the Menander at Pompeii. Volume I: The Structures* (Oxford 1997) on a sculptor's workshop at insula I.10.6 in Pompeii 147–48. Allison P. M. (2000) *Insula of the Menander. Volume III: The Finds: a Contextual Study* (Oxford 2006) 333. *Aphrodisias*: Rockwell P. (1991) "Unfinished statuary associated with a sculptor's studio", in *Aphrodisias papers 2: The Theatre, a Sculptor's Workshop, Philosophers, and Coin-Types,* edd. R. R. R. Smith and K. T. Erim (JRA Suppl. Ser. 2) 127–43. Smith R. R. R. (1999) "Late antique portraits in a public context. Honorific statuary at Aphrodisias in Caria, A.D. 300–600", *JRS* 99 (1999) 155–89. Karagöz S. (1999) "Zur Lokalisierung einer Marmorwerkstätte in Ephesos", in *Steine und Wege. Festschrift für Dieter Knibbe zum 65. Geburtstag*, edd. P. Scherrer, H. Täuber and H. Thür (Österreichisches Archäologisches Institut Sonderschrift 32) (Vienna 1999) 55–60.

Functional artefact studies: Strong D. and Claridge A. (1976) "Marble sculpture", in *Roman Crafts*, edd. D. Strong and D. Brown (London 1976) 195–207. Rockwell P. (1993) *The Art of Stoneworking: A Reference Guide* (Cambridge 1993) esp. 31–68. Grossman J. B. (2003) *Looking at Greek and Roman Sculpture in Stone: A Guide to Terms, Styles, and Techniques* (Los Angeles 2003).

Taverns and Restaurants

Taverns and restaurants must have been present at most antique sites. However, no consistent definition exists for how they might be recognised in the archaeological record. Literary evidence provides several Latin terms such as *tabernae, cauponae, popinae* and *thermopolia* but, as Ellis (2004) has convincingly pointed out, these classifications cannot be reconciled in a uniform way with the archaeological remains. Extensive evidence of bars comes from Pompeii and also from Ostia, where most

bars were dated on stylistic features (mosaics, masonry, wall-paintings) to the late 2nd–3rd c. A.D. Because of well-preserved fixtures at these sites, the identification of structures as bars or restaurants elsewhere is generally based on the presence of masonry retail service counters, sometimes in association with large ceramic vessels such as dolia, for the temporary storage of food and drinks sold. The presence of such counters, however, seems to be limited to Italy (MacMahon (2003) 80; MacMahon (2005)), while taverns and restaurants must have existed all over the Roman empire as evidenced by pictoral and literary sources, such as the Yakto mosaic and the *Life of Symeon the Fool*. Other elements used to identify bars or restaurants are masonry benches or structural features, linked to the storage or preparation of food and drinks, such as storage vats, cellars, ovens, hearths or furnaces.

While the structural evidence for the *tabernae* in Ostia and Pompeii is quite extensive, little or nothing is known, unfortunately, of the internal arrangements of objects from these sites. Hermansen remarks, for example, that at Ostia only sculptures and inscriptions were satisfactorily recorded during the excavation (Hermansen (1981) 126). Recent excavations with more careful records provided a better idea of the objects which could be encountered in taverns or bars. At Sardis, rooms W2/W1 and E1/E2 (which contained masonry benches) were identified as *thermopolia* or restaurants based on the presence of a large number of coins, glass goblets, amphorae, coarse and fine ware vessels, chains, lampstands, and a kitchen knife. At Scythopolis, 6 shops opposite the nymphaeum have been interpreted as units for preparing and selling food. The presence of benches and the abundance of mortars, cooking pots, plates, jugs, glass vessels, etc. suggested that food was processed and served. At Sagalassos, a detailed analysis of the circulation patterns within a complex of 5 interrelated rooms on the lower agora, in connection with the structural and artefactual evidence, made it possible to recognise a restaurant with a kitchen, a space for consuming the meals prepared, and some more private rooms. In addition, at least two small shops selling food to by-passers were identified on the opposite side of the agora. The material from both the restaurant and these two 'bars' could be dated between the second half of the 6th and the first half of the 7th c. A.D. The evidence was not as rich as in Scythopolis or Sardis because the rooms were gradually abandoned, rather than suddenly destroyed; nevertheless the restaurant/bars contained benches, a private water supply, a hearth with associated cooking ware, implements for food preparation, imported and local amphorae, containers,

an *authepsa* handle, tableware, suspension devices and archaeozoological and palaeobotanical material representing refuse from food preparation and consumption. The presence of a large quantity of animal bones representing refuse from the preparation of meals seems to be typical for structures identified as bars or taverns: large animal bone assemblages were retrieved from contexts related to the "occupation" of the taverns in Sardis, Scythopolis, Corinth and Sagalassos. Such deposits might indicate that, at least shortly before abandonment, waste was allowed to accumulate close to the area where the food was prepared.

Another important factor for the identification of taverns and restaurants is their strategic position in the urban framework (Ellis (2004)). Taverns and bars were invariably located in a central position or alongside the main thoroughfares of the city. The taverns of Sardis, for example, were located on both sides of the entrance to the Bath-Gymnasium complex. The bars at Scythopolis were situated on a strategic position along the main pilgrim route through the city. In Petra they were located along one of the main streets, while at Sagalassos and Cyrene they were sited on one of the main squares of the city. Another desirable place seems to be close to the theatre, where the shops could sell their snacks and drinks to the theatre crowds, which seems to be the case at Corinth and possibly Xanthos (see Manière-Lévêque in this volume).

Archaeological sites, with imporant fixtures/stratigraphy by region: *Britain*: MacMahon A. (2003) above 69–70. *Italy*: Hermansen G. (1981) *Ostia. Aspects of Roman City Life* (Alberta 1981) 125–83. Girri G. (1956) *La taberna nel quadro urbanistico e sociale di Ostia* (Roma 1956). Pavolini C. (1986) *La vita quotidiana a Ostia* (Rome and Bari 1986). Kleberg T. (1957) *Hôtels, restaurants et cabarets dans l'antiquité romaine* (Uppsala 1957). Kleberg T. (1963) *In den Wirtshäuseren und Weinstuben des antieken Rom* (Darmstadt 1963). Ellis S. J. R. (2004) "The distribution of bars at Pompeii: archaeological, spatial and viewshed analyses", *JRA* 17 (2004) 371–84. Packer J. E. (1978) "Inns at Pompeii: a short survey", *CronPomp* 4 (1978) 5–53. MacMahon A. (2005) "The taberna counters of Pompeii and Herculaneum", in *Roman Working Lives and Urban Living*, edd. A. MacMahon and J. Price (Oxford 2005) 70–87. *Greece and the Balkans*: Williams C. K. and Zervos O. H. (1986) "Corinth 1985: east of the theatre", *Hesperia* 55 (1986) 129–75. Williams C. K. and Zervos O. H. (1987) "Corinth 1986: temple E and east of the theatre", *Hesperia* 56 (1987) 1–46. *Asia Minor*: Putzeys T. *et al.* (forthcoming) "Shops and retail in Late Antiquity: a contextual approach to the material evidence from Sagalassos", in *Dialogue with Sites. The Definition of Space at the Macro and Micro-Level in Imperial Times*, edd. H. Vanhaverbeke, F. Vermeulen, J. Poblome and M. Waelkens (Studies in Eastern Mediterranean Archaeology 8) (Turnhout forthcoming). Waelkens M. *et al.* (2007) "Two late

antique to Early Byzantine housing complexes at Sagalassos", in *Housing in Late Antiquity*, edd. L. Lavan, L. Özgenel and A. Sarantis (Late Antique Archaeology 3.2) (Leiden 2007) 495–513. Crawford (1990) above 37–51. *Near East*: Fiema Z. T. (1998) "The Roman Street of Petra Project 1997. A preliminary report", *ADAJ* 42 (1998) 395–424. Kanellopoulos Ch. (1999) "Petra. The Roman Street Project", *AJA* 103 (1999). 507–10. Agady S. *et al.* (2002) above. *Cyrenaica*: Stucchi S. (1965) "Thermopoleion", in *L'Agora di Cirene I, I lati nord ed est della platea inferiore*, ed. S. Stucchi (Roma 1965) 325–26.

Depictions: *Yakto mosaic*: see above. *Early Imperial reliefs*: Tomb of a Roman wine merchant from Dijon (2nd–3rd c. A.D.); Archaeological museum of Dijon. Relief depicting a Roman tavern interior; Museum of Augsburg. A late 3rd c. A.D. reliefs of Ostia depicts the arrival of a ship at the port showing the harbour on the left and a tavern scene on the right; Museo delle Navi inv. no. 1340.

Literary sources, selected: Leont. N. *v. Sym.* 4 .146–48; 153. *Chrys. *Hom in Eutrop.* 2.5. Amm. Marc. 28.4.34.

Bakeries

Although bread was an essential part of the diet, there is very little archaeological evidence for industrial bakeries outside of Pompeii and Ostia. The lack of evidence for bakeries probably indicates that a great deal of baking was carried out on a domestic level and that the selling of bread might have been an expansion and adaptation of a domestic activity to those outside the family unit. However, industrial bakeries—mentioned by Julian of Ascalon as a potential source of damage for nearby buildings (Hakim (2001) 10)—must have existed, especially in larger settlements, where they had a sufficient customer base to survive. In archaeological contexts, bakeries are normally identified on the presence of grinding stones and ovens. Such installations were found in Banasa (Morocco) and a few sites in Roman Britain. Organised urban bakeries did exist in late 4th c. Antioch, some employing slave labour, organised into a guild, of whom Libanius acted as their patron. Bread shops and bakeries could also be found at Constantinople in AD 560/61.

Syntheses: Curtis R. I. (2001) *Ancient Food Technology* (Leiden 2001) 358–70. Tengström E. (1974) *Bread for the People: Studies of the Corn Supply of Rome during the Late Empire* (Acta Instituti Romani Regni Sueciae 12) (Stockholm 1974).

Archaeological sites, by region: *Britain*: MacMahon (2003) above 65–66. *Italy*: Cubberley A. L. (1985) "Bread-baking in Roman Italy", in *Food in Antiquity*, edd. J. Wilkins, D. Harvey and M. Dobson (Exeter 1985). Bakker J. T. (1999) ed. *The Mills-Bakeries of Ostia. Description and Interpretation* (Amsterdam 1999).

Bakker J. T. (2001) "Les boulangeries à moulin et les distributions de blé gratuites", in *Ostia. Port et porte de la Rome*, ed. J.-P. Descoedres (Geneva 2001) 179–85. On line: http://www.ostia-antica.org/dict/topics/bakeries/bakeries.htm. Mayeske B. J. (1972) *Bakeries, Bakers and Bread at Pompeii: A Study in Social and Economic History* (Maryland 1972). Mayeske B. J. (1979) "Bakers, bakeshops, and bread: a social and economic study", in *Pompeii and the Vesuvian Landscape* (Washington, D. C. 1979) 39–58. *Near East*: Hirschfeld Y. (1996) "The importance of bread in the diet of the monks in the Judean Desert", *Byzantion* 66 (1996) 143–55 (study of a semi-commercial baking oven in Palestine, Khirbat al-Dayr). *Africa*: MacKendrick P. (1980) *The North African Stones Speak* (London 1980) refers to bakeries in Banasa and Volubilis.

Functional artefact studies: Galavaris G. (1970) *Bread and the Liturgy: The Symbolism of Early Christian and Byzantine Bread Stamps* (Madison 1970).

Depictions: On the process of the industrial baking of bread, see especially the grave reliefs on the tomb of M. Vergilius Eurysaces in Rome; Curtis (2001) 359, fig. 28; see also Brandt O. (1993) "Recent research on the tomb of Eurysaces", *OpRom* 19.2 (1993) 13–17. Another example is the sarcophagus of Lucius Annius Octavius Valerianus depicting the production of bread from harvest till baking; Vatican Museum Rome inv. no. 10536 (*CIL* 6.11743). There also exists an Early Imperial wall painting in house VII.iii.30 at Pompeii depicting the sale of bread; Museum of Naples.

Literary sources, selected: Bakers of Antioch: references assembled in Liebeschuetz J. H. W. G. (1972) *Antioch. City and Imperial Administration in the Later Roman Empire* (Oxford 1972) 52–53. Bread shops and bakeries at Constantinople in AD 560/61: Malalas 18.131, using Theophanes 234.30–235.15 (A.D. 560/61).

Inscription: Sitifis in Numidia restoration of the bakeries of the public *annona*: *CIL* 8.8480 = *ILS* 5596 (A.D. 383–92).

Butchery and Related Products

The large quantities of meat bones found at late antique urban sites indicate that the consumption of meat was a notable aspect of cities of this period. Although butcher's equipment such as knives, cleavers, flesh and meat hooks are sometimes found (e.g. Manning (1972) 174–76; Waldbaum (1984) 54–58), the presence of a butcher's shop or a meat market is in most cases only attested by rubbish deposits of animal bones originating from body parts, which were not suitable for consumption or which were defleshed completely, such as skulls, metapodia and phalanges. Most of these bones contain cut, chop and shave marks as a result of the slaughtering, skinning and initial division of the carcass into major cuts or portions.

To provide meat for urban populations, slaughterhouses were situated outside the larger cities during the imperial period (MacMahon (2003) 62–63). Such establishments would have required space to keep the animals prior to slaughtering, an area to carry out the killing, and further space for the butchering itself (Frayn (1995) 108). The slaughtered animals were then transported and conveyed to butcher's shops or stalls in the city centre for further processing and for retail (Curtis (2001) 398). Structural evidence of such slaughterhouses is rarely identified (such as Site xxiii–xxv at Vindolanda (Birley (1977) 40), and even then is its interpretation is not uncontested (MacMahon (2003) 63). However, deposits of butchery refuse in the centres of late antique towns indicate that the slaughtering of animals took place in the towns themselves. Probably, animals were cut up for sale in the open air, close to small shops or stalls where the meat was sold (MacMahon (2003) 63). The presence of dumps of butchery refuse in occupied areas, attested archaeologically, finds an echo in the *Digest* (43.10.1.5), which forbade the use of streets as dumping grounds for skins and butchery refuse, though we also hear of carcasses being dumped habitually outside of a city, at Gaza (Sozomen *Hist. Eccl.* 5.9.5). Evidence for butcher's retail shops is limited to a single depiction from Antioch (on the Yakto Mosaic), where a butcher is using wooden table and knives similar to representations of earlier times.

The leather industry was a by-product of butchery and was closely associated with the supply of meat. Leather-working can be divided into two categories: the processing of hides into leather, and the production of leather items. Although the industrial process of tanning required specialised equipment such as troughs, tanks and ovens, little direct evidence for such activities has been found. The premises of cobblers and other leatherworkers are equally difficult to identify due to the fact that their products are generally not preserved. The presence of workshops for bone carving is archaeologically attested by refuse deposits of bone waste and unfinished implements of carved bone. Good examples of refuse evidence for bone and ivory carving workshops come from Alexandria and Sagalassos.

Syntheses: *General*: Serjeantson D. and Waldron T. (1989) *Diet and Crafts in Towns: The Evidence of Animal Remains from the Roman to the Post-Medieval Periods* (BAR Brit. Ser. 199) (Oxford 1989). *Butchery*: Frayn J. M. (1995) "The Roman meat trade", in *Food in Antiquity*, edd. J. Wilkins, D. Harvey and M. Dobson (Exeter 1995) 107–14. Curtis (2001) above 358–70. *Leather working*: Waterer J. W. (1976) "Leatherwork", in *Roman Crafts*, edd. D. Strong and D. Brown (London 1976). Waterer J. W. (1968) *Leather Craftmanship* (London 1968).

Archaeological sites, by region: *Britain*: Birley R. (1977) *Vindolanda: A Roman Frontier Post on Hadrian's Wall* (London) 40. MacMahon (2003) above 62–64. *Asia Minor*: De Cupere B., Van Neer W. and Lentacker A. (1993) "Some aspects of the bone-working industry in Roman Sagalassos", in *Sagalassos II. Report on the third Excavation Campaign of 1992*, ed. M. Waelkens and J. Poblome (Acta Archaeologica Lovaniensia Monographiae 6) (Leuven 1993). *Egypt*: Rodziewicz E. (1998) "Archaeological evidence of bone and ivory carvings", in *Commerce et artisanat dans l'Alexandrie hellénistique et romaine. Actes du Colloque d'Athènes, déc. 1988*, ed. J.-Y. Empereur (BCH Suppl. 33) (Paris 1998) 135–58.

Functional artefact studies: Manning W. H. (1972) "The iron objects", in *Verulamium Excavations: Volume 1*, ed. S. S. Frere (Reports of the Research Committee of the Society of Antiquaries of London 28) (London 1972) 163–95. Waldbaum (1984) above 54–58.

Depictions: Depictions of butchers are known from amongst other the Yakto mosaic (see above), sarcophagi from Dresden (Zimmer (1982)) and Ostia (Antiquarium inv. no. 133), and from a 1st c. A.D. oil lamp in the British museum (inv. no. GR 1927.7–12.1).

Schools

Schools can also be classified as shops because most teachers were private entrepreneurs, trying to sell their knowledge by building up a reputation and gathering as many students as possible. Basic instruction in letters was open to the urban middle class in most cities, but participation in philosophical or legal training required the necessary leisure and wealth to study under the most erudite teachers, restricting it to the wealthy classes of society, and to major regional centres. Most evidence for teachers or philosophers, who earned their living by providing education to the urban elite, is textual, though this includes school books as well as descriptions of actual classes. The classes that we hear about often took place on the squares of the city, or in major public buildings, such as basilicas, temples and bouleuteria, or private houses. Gymnasia fell out of favour by the early 4th c., whilst, education began to be increasingly organised around churches from the 5th c. onwards. There are few excavated examples of specialised school buildings, the most credible being those excavated in Kom el-Dikka in Alexandria. These constitute a series of four adjoining lecture halls, arranged with three or four rows of seats accommodating space for 60 to 80 students. Of the actual objects used in school we are mainly confined to reconstructing the schools of children/early adolescents. Here a few details are provided by late texts, such as of the leather bag used to transport scrolls. There are a few problematic depictions

such as that of the Seven Physicians of the 6th c. Vienna Dioscurides, but our main visual sources remain Early Imperial depictions and school figurines from the same period. From these it is not too hard to imagine writing tablets and *styli* (still seen in depictions of the law court etc.), a teacher's chair (Lib. *Or.* 1.35 (Athens), 31.31 (Antioch)) and a stick for beating inattentive pupils. Such sticks are mentioned by Ausonius and Augustine, whose learning of arithmetic also probably implies the presence of an abacus, as earlier. Augustine mentions veils hanging from the doors of schools of literature (*Conf.* 1.14) as a sign of their prestige.

Synthetic works on education and schools: *General*: Bonner S. F. (1977) *Education in Ancient Rome*: *From the Elder Cato to the Younger Pliny* (Campus 198) (Berkeley 1977). Bowen J. (1972) *A History of Western Education 1. The Ancient World*: *Orient and Mediterranean 2000 B.C.–A.D. 1054* (London 1972). Clarke M. L. (1971) *Higher Education in the Ancient World* (London 1971). Harris W. V. (1989) *Ancient Literacy* (Cambridge 1989). Marrou H. I. (1981) *Histoire de l'éducation dans l'Antiquité*, 2. vols. (Paris 1981, 8th ed.). Booth A. (1979) "Elementary and secondary education in the Roman Empire", *Florilegium* 1 (1979) 1–14. Too Y. L. (2001) ed. *Education in Greek and Roman Antiquity* (Leiden 2001). *Late Antiquity*: Leclerq H. (1921) "Écoles", *DACL* 4.2 (Paris 1921) 1831–83. Liebeschuetz J. H. W. G. (1991) "Hochshule", *RAC* 15 (Stuttgart 1991) 858–911. Browning R. (2000) "Education in the Roman empire", in *Late Antiquity: Empire and Successors, A.D. 425–600*, edd. A. Cameron, B. Ward-Perkins and M. Whitby (CAH 14) (Cambridge 2000) 855–83. Vössing K. (2002) "Staat und Schule in der Spätantike", *Ancient Society* 32 (2002) 243–62. Kaster R. A. (1997) *Guardians of Language: The Grammarian and Society in Late Antiquity* (The Transformation of the Classical Heritage 11) (Berkeley 1997). Guillou A. (1972) "L'école dans l'Italie byzantine", in *Settimane di studi del centro italiano sull' alto medioevo* 19 (Spoleto 1972) 291–311. *Germanic successor states*: Riché P. (1962) *Éducation et culture dans l'Occident barbare, 6e et 7e siècle* (Paris 1962). Riché P. (1991) "Réflexions sur l'histoire de l'éducation dans le Haut Moyen Âge (Ve–XIe siècles)", in *Éducations médiévales: l'enfance, l'école, l'église en Occident (Ve–XVe siècles)*, ed. J. Verger (Histoire de l'éducation 50) (Paris 1991) 17–38. Riché P. (1957) "La survivance des écoles publiques en Gaule au Ve siècle", *Le Moyen Âge* 63 (1957) 421–36. Riché P. (1965) "L'enseignement du droit en Gaul du VIe au XIe siècle", *Ius Romanum Medii Aevi* 1.5b (1965) 1–21. Riché P. (1972) "L'enseignement et la culture des laïcs dans l'Occident précarolingien", *Settimane di studi del centro italiano sull' alto medioevo* 19 (Spoleto 1972) 231–51. Bardy J. (1953) "Les origines des écoles monastiques en Occident", *Sacris Erudiri* 5 (1953) 86–104.

Everyday details: Booth A. (1973) "Punishment, discipline and riot in the schools of Antiquity", *EchCl* 17 (1973) 107–14. Hopkins K. (1993) "Everyday life for the Roman schoolboy", *History Today* 43:10 (1993) 25–30.

Archaeological sites: *Egypt*: Haas C. (1997) *Alexandria in Late Antiquity* (London 1997) 193–99. Rodziewicz E. (1993) "Late Roman auditoria in Alexandria

in the light of ivory carvings", *Bulletin de la Société archéologique d'Alexandrie* 45 (1993) 269–79.

Depictions: Seven Physicians of the 6th c. Vienna Dioscurides seems to represent a teacher and his pupils; there are no known depictions from Late Antiquity, though they are known from the Early Imperial period from both Pompei, and grave reliefs of the Rhineland.

Literary sources, selected: *Auson. *Ep.* 22. Augustine *Conf.* 1.12–14. Libanius *Or.* 3.10–18 for a commentary, see Norman A. F. (2000) *Antioch as a Centre of Hellenic Culture as Observed by Libanius* (Translated Texts for Historians 34) (Liverpool 2000).

School books: Dionisotti A. C. (1982) "From Ausonius's schooldays: a schoolbook and its relatives", *JRS* 72 (1982) 83–125. Bücheler F. (1922) ed. *Testamentum Porcelli* (Berlin 1922). Mocci B. (1981) *Testamentum Porcelli. Una problematica parodia tardolatina* (Innsbruck 1981). Champlin E. (1987) "The Testament of the piglet", *Phoenix* 41.2 (1987) 174–83. Goetz G. (1892) ed. *Corpus Glossariorum Latinorum. Vol. III: Hermeneumata pseudodositheana* (Leipzig 1892). Flammini G. (2004) ed. *Hermeneumata Pseudodositheana Leidensia. Bibliotheca Scriptorum Graecorum et Romanorum Teubneriana* (Munich 2004). Green R. P. H. (1991) ed. *The Works of Ausonius* (Oxford 1991).

Others

Many other types of shops which sold various products or rendered services to customers left little or no trace in the archaeological record, but are visible in either texts or *topos* inscriptions. Trade products that were either very valuable (such as silver and gold) or perishable (such as vegetables and fruit, but also cloth) leave few traces (Curtis (2001)), meaning that we rely heavily on Early Imperial depictions (especially funerary reliefs) for any idea of how these shops might have been organised. In the first case, the valuable content of the shops or workshops will have been cleaned out, even after a catastrophic destruction, while in the second case, the products themselves simply did not survive. Only under very exceptional conditions of sudden destruction, are these trades preserved archaeologically, as at Sardis, where an office or bank was identified (shop E8) (Crawford (1990) 66–71) and at Scythopolis where the workshop of a goldsmith was preserved (Khamis, this volume). Retail of a wide range of products will have taken place in markets in the open air, in the streets or on the main squares of the city (Lib. *Or.* 11.251–55; August. *Psalm* 81.2, 81.16; de Ligt (1993)). In such markets, the items for sale were displayed in temporary stalls rather than in permanent shops, only leaving occasional marks on the pavement, as

seen at Cherchel and Sagalassos, or *topos* inscriptions. Exceptionally, a price list of foodstuffs on sale survived in an alcove of the later 4th c. Tetrastoon at Aphrodisias (Roueché (1989) no. 213).

Besides retailers a whole middle class of 'craft workers' existed, providing services to the inhabitants of the city. To this category belong notaries, scribes, barbers, doctors, perfumers, artists and others. Their presence is well-attested in literary sources but is very seldom visible archaeologically. A glimpse of the activities taking place alongside the streets of Eastern cities in Late Antiquity can be seen on the topographic border of the Megalopsychia mosaic of Yakto (Antioch) which displays, amongst other things, a vendor behind a wooden table, people in a bar, people playing dice, etc. It is clear that only by combining archaeological with textual and iconographic sources can we reconstruct a vivid picture of the late antique city and the artisanal production, retail and display of services taking place alongside its roads.

Syntheses: Curtis (2001) above. de Ligt L. (1993) *Fairs and Markets in the Roman Empire: Economic and Social Aspects of Periodic Trade in a Pre-Industrial Society* (Dutch Monographs on Ancient History and Archaeology 11) (Amsterdam 1993).

Archaeological sites: *Perfumers*: Brun J.-P. (1998) "Une parfumerie romaine sur le forum de Paestum", *MEFRA* 110 (1998) 419–72. Brun J.-P. (2000) "The production of perfumes in Antiquity: the cases of Delos and Paestum", *AJA* 104 (2000) 277–308. Mattingly D. J. (1990) "Paintings, presses and perfume production at Pompeii", *OJA* 9 (1990) 71–90. *Mosaicist*: A 4th c. mosaic workshop has been excavated at Complutum in Spain, though it is not yet published: S. Rascon Marqués pers. comm. *Offices*: Crawford (1990) 66–71 above.

Inscriptions: see the commentary on *topos* inscriptions in the introduction and especially: Roueché C. (1989) *Aphrodisias in Late Antiquity* (London 1989), esp. nos. 22 and 187–213 with commentary.

Literary sources, selected: *Doctors*: Chrys. *Hom. in II Thess*. 3.1.9, 10. *Perfume shop*: Chrys. *Hom. in Jo.* 53 (John 8.20). Lib. *Or.* 1.68 (at Nicomedia before trial). See also Connors C. (1997) "Scents and sensibility in Plautus' *Casina*", *CQ* 47 (1997) 305–309. Green P. (1979) "Ars Gratia Cultus: Ovid as beautician", *AJP* 100 (1979) 381–92. *Painter*: Chrys. *Hom. in Ac.* 30 (Acts 13.42).

Depictions: Carpenter on ivory relief from Alexandria, 3rd or 4th c. A.D. (Princeton Art Museum inv. y1956–105). Depictions of grocerers selling their goods on the market on late 2nd–3rd c. A.D. reliefs from Ostia (Antiquarium inv. nos. 134, 198).

Functional artefact studies: *Doctors*: Jackson R. (2005) "The role of doctors in the city", in *Roman Working Lives and Urban Living*, edd. A. MacMahon and J. Price (Oxford 2005) 202–20. *Carpenters*: Ulrich R. B. (2007) *Roman Woodworking* (New Haven and London 2007) esp. 13–59. Long D. A., Steedman K. and Vere-Stevens L. (2002) *The Goodmanham Plane. A Unique Roman Plane of the Fourth Century AD, Discovered in Yorkshire in A.D. 2000* (Chipenham 2002). *Perfumers*:

Jackson R. (1993) "The function and manufacture of Romano-British cosmetic grinders: two important new finds from London", *The Antiquaries Journal* 73 (1993) 165–69. Painters: Ling R. (1991) *Roman Painting* (Cambridge 1991), chapter 10 on technique. Barbers: Nicolson F. W. (1891) "Greek and Roman Barbers", *HSCP* 2 (1891) 41–56. David B. K. (1957) "Roman barbers", *The Classical Weekly* 25.19 (1957) 146–48. Plautus lists tools of barbers, see Boon G. C. (1991) "Tonsor humanus: razor and toilet-knife in Antiquity", *Britannia* 22 (1991) 21–32. Schneider W. J. (2001) "Eines Tonsors Glanz und Elend", *Hermes* 129 (2001) 394–409.

Market Buildings and Commercial Basilicas

Some trades, which did not require permanent specialised fixtures, could be found housed in public buildings, which assembled them together in a coherent spatial setting. Repairs in the 4th and early 5th c. to civil basilicas, away from provincial capitals, are likely to have been commercially orientated, as civic judicial magistrates were now rare, and the jurisdiction of governors was now concentrated in the metropolis. But specialised commercial basilicas also existed, as shown at Cuicul and Constantinople.

Market buildings continued to be occupied, built and repaired (in the 4th to early 5th c. West and 4th–6th c. East), whilst some public buildings were converted to cellular units, forming very similar complexes to macella. A single early 5th c. deposit of coins from the floor of the Basilica Aemilia is likely to represent a money changer's stock, but otherwise we know little about late commerce from material culture. Current excavations of macella at Sagalassos and Apamea, the former very rich in early 7th c. artefacts, may change this. Specialised public measuring blocks have been found for the Early Imperial period for regulating commerce in public spaces, which still survived in market buildings. It is not known if such blocks were still made in Late Antiquity: certainly personal portable equivalents were still produced, suggesting that public stone versions remained in use as well.

Because of the paucity of artefactual evidence for these important structures, a listing of slight evidence for their repair during Late Antiquity is given here, as this is the best testimony to their use.

Syntheses: de Ruyt C. (1983) *Macellum. Marché alimentaire des Romains* (Publications d'histoire de l'art et d'archéologie de l'Université catholique de Louvain 35) (Louvain-la-Neuve 1983). de Ruyt C. (2000) "Exigences fonctionnelles et variété des interpretations dans l'architecture des macella du monde romain",

in *Mercati permanenti e mercati periodici nel mondo romano. Atti degli Incontri capresi di storia economica antica (Capri 13–15 ottobre 1977)*, ed. E. Lo Cascio (Bari 2000) 177–86.

Architecture, commercial basilicas: *Cuicul*: *basilica vestiaria* (built anew): *CIL* 8.20156 = *ILS* 5536 (A.D. 364–67). *BCTH* (1919) 96. Ballu A. (1926) *Guide illustré de Djemila* (Alger 1926) 98. *Constantinople*: Basilica of the skindressers: *Chron. Pasc.* Olympiad 327 A.D. 531 mentioned.

Architecture, repairs to civil basilicas outside provincial capitals, in epigraphy: *Saepinum*: inscription of A.D. 352/57: Soprintendenza Molise (1979) *Sepino archeologia e contiuità* (Campobasso 1979) 79–80. *Paestum*: 3rd or 4th c. A.D. Mello M. and Voza G. (1968–69) *Le iscrizioni latine di Paestum* (Napoli 1968–69) 242–43, no. 168. Greco E. and Theodorescu D. (1980) *Poseidonia-Paestum 1 La 'curia'* (CÉFR 42) (Rome 1980) 16–21. *Thubursicu Numidiarum*: *ILAlg* 1.1287. *Cuicul*: *AE* (1946) 107 = *CRAI* (1943) 381–83 (A.D. 364–67), Février P. A. (1971) *Djemila* (Alger 1971) 56. *Lepcis*: restoration of basilica in old forum (*IRT* 467 A.D. 324–26) and Basilica Ulpia (*IRT* 543, late 3rd or early 4th c.). *Puteoli*: *CIL* 10.1693–94 = *ILS* 791. *Madauros*: *ILAlg* 1.2135 —late empire because of use of term *curiales*: see Lepelley C. (1979) *Les cités de l'Afrique romaine au Bas-Empire. Vol. 2* (Études Augustiniennes Série Antiquité 80) (Paris 1979) 133. *Vaga*: restored *a fundamentis* in A.D. 376–77 *CIL* 8.14398 = *CIL* 8.1219 + *ILTun*. 1226. *Tunis/Medjez el Bab*: *CIL* 8.9997 (between A.D. 305 and 361). *Cirta Constantina*: *IL Alg.* 2.624 = *CIL* 8.7037 (A.D. 362–63).

Architecture, repairs to civil basilicas outside of provincial capitals, in archaeology: *Complutum*: Rascón Marqués S. (1999) "La ciudad de Complutum en la tardoantigüedad: restauración y renovación", in *Actas del I Encuentro Complutum y las ciudades hispanas en la Antigüedad Tardía. Alcalá de Henares, Octubre de 1996*, edd. L. A. García Moreno and S. Rascón Marqués (Acta Antiqua Complutensia 1) (Alcalá de Henares 1999) 51–71, esp. 53–57, 66. *Sabratha*: Kenrick P. M. (1986) *Excavations at Sabratha. 1948–1951. A Report on the Excavations conducted by Dame Kathleen Kenyon and John. Ward-Perkins* (JRS Monograph 2) (London 1986) 80–87. *Saepinum*: Soprintendenza Molise (1979) *Sepino archeologia e contiuità* (Campobasso 1979) 79. *Lucus Feroniae*: temple converted into basilica: Bartoccini R. (1961) "Colonia Iulia Felix Lucus Feroniae", in *Atti del settimo congresso internazionale di archeologia classica* 2, edd. AAVV. (Rome 1961) 250–56. *Philippi*: *ca.* 500: Sève M. (1996) "L'oeuvre de l'École Française d'Athènes à Philippes pendant la décennie 1987–1998", *AEMT* 10b (1996) 705–15. *Aspendos*: spolia repairs pers. observ. May 2003. *Xanthos*: unspoliated and apparently rebuilt using material from same structure: Laurence Cavalier pers. comm. *Ascalon* possible: *PEFQ* (1921), (1922), (1923). Fischer J. M. (1995) "The Basilica of Ascalon: marble, imperial art and architecture in Roman Palestine", in *The Roman and Byzantine Near East: Some Recent Archaeological Research*, ed. J. H. Humphrey (JRA Suppl. Ser. 14) (Ann Arbor 1995) 121–50.

Architecture, new market buildings: *Complutum*: Rascón Marqués (1999) 53–57 above. *Geneva*: de Ruyt (1983) above 73–75. *Madauros*: restoration of temple of fortune transformed into market: *ILAlg* 1.2103 (A.D. 379–83). *Cyrene*: Stucchi S. (1965) *L'Agora di Cirene I, I lati nord ed est della platea inferiore* (Roma 1965) 307–12, 324. *Athens*: the 'square building' on the agora: Baldini Lippolis

I. (2003) "Sistema palaziale ed edifici amministrativi in età protobizantina: il settore settentrionale dell'Agorà di Atene", *Ocnus* 11 (2003) 13–16. *Constantinople*: several listed in the early 5th c. Notitia are in new quarters of the city, and so must be late antique developments: e.g. *Not. Const.* 6.27 (Regio 5), 9.17 (Regio 8). Socrates *Hist. eccl.* 1.38.9. Mundell-Mango M. (2000) "The commercial map of Constantinople", *DOP* 54 (2000) 189–207, esp. 193–94.

Architecture, repaired market buildings: *Ostia*: de Ruyt (1983) above 124 and *CIL* 14 s.1 4719 (A.D. 418–19). *Sagalassos:* unpublished *Internal Report* 2006. *Apamea*: Apamea excavation team pers. comm. *Gerasa*: Uscatescu A. and Martín-Bueno M. (1997) "The macellum of Gerasa (Jerash, Jordan): from a market place to an industrial area", *BASOR* 307 (1997) 67–88. *Wroxeter*: Ellis P. (2000) ed. *The Roman Baths and Macellum at Wroxeter. Excavations by Graham Webster 1985–55* (English Heritage Archaeological Report 9) (London 2000) 75 and elsewhere.

Architecture, halls of cellular shops inserted into public buildings: *Herdonia*: gymnasium and basilica, see Mertens J. (1995) "Dal tardo antico all'altomedieovo", in *Herdonia Scoperta di una città*, ed. J. Mertens (Brussels and Rome 1995) 339–41. *Aphrodisias*: theatre baths and Sebasteion, see Erim K. (1986) *City of Venus Aphrodite* (London 1986) 94–95. Smith R. R. R. and Ratté C. (1998) "Archaeological research at Aphrodisias in Caria 1996", *AJA* 102 (1998) 238–39, with 191–93.

Functional artefact studies: Flinders Petrie W. M. (1974) *Glass Stamps and Weights: Ancient Weights and Measures* (Warminster 1974) pl. xvi. On Roman measuring blocks, see de Ruyt (1983) 320–321.

Archaeological site: *Rome*: Basilica Aemilia money-changers' coins in destruction layer on basilica floor, the latest of which is A.D. 409: Reece R. (1982) "A collection of coins from the centre of Rome", *BSR* 50 (1982) 117, 127, 131–33.

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POLITICAL SPACE IN LATE ANTIQUITY

Luke Lavan

Introduction

Political, social and religious space in Late Antiquity differs from economic and domestic space for a number of reasons. Above all, the sources are fundamentally different: much of our knowledge depends on texts, whether legal, literary, hagiographic or epigraphic. Architecture can be a useful source, as political and religious buildings had distinctive forms, but these forms did not always relate closely to the exact function of buildings. Architectural fixtures and fittings, such as benches, marble screens and cupboards, are sometimes informative. This especially true of churches, but the open meeting halls of civil basilicas or curiae are not often rich in surviving fittings. Furthermore, the stratigraphic archaeology of public meeting spaces is also frequently disappointing: many social and political activities used few objects and produced little waste; any such waste has left little trace, being located in public areas that were well-cleaned. On occasion, site finds do allow us to reconstruct the 'everyday life' of soldiers and monks, but this tends to relate to domestic and productive activities rather than behaviours distinctive to forts and monasteries. Objects relating to religious and political activities sometimes come down to us through preservation in sacral contexts. However, such contexts are rare. Deliberate deposition of military and religious goods, e.g., in hoards, also occurs, providing very high value contexts for reconstructing artefact assemblages. One cannot excavate the activities and objects used within a late antique law court. Yet the writers of the ancient world can tell us much about objects used in such ceremonies and about the cultural meaning of these activities. Both authors and readers were very interested in political, social and religious topics, much more than in economic matters. Depictions also often deal with political or religious events and representation, providing similar insights, in a vivid if iconographically filtered manner. Epigraphy has a role to play, as some social and political activity dealt with commemoration and the assertions of rights. At the same

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time, acclamations and graffiti can be spatially related to patterns of everyday life.

The array of available sources may seem rich, but it is very uneven. One could reconstruct an idealised late antique metal workshop from ten excavated sites, and thus produce a convincing museum replica. But for churches, or for any political space, reconstructions must depend on an amalgam of a small number of texts from a few major cities, perhaps complemented by one or two depictions, and occasionally a single hoard. We have a great number of building plans, especially for churches, but reaching beyond them to activities and the use of objects depends on the disciplined interpretation of a few widely scattered sources, with the consequence that our knowledge of some important spatial types is very thin indeed. The bibliographic essays which follow reflect these constraints. Sometimes our best testimony for the use of a particular space is the presence of small scale repairs. Conversely, sometimes architectural plans seem to be of little help, and it is better to stress high-value evidence such as depictions or hoards, even if these are very rare. To my mind, an interpretative approach is at present the only way forward: our sources are fragmentary and simply assembling large quantities of low quality material will never provide clear insights into the use of religious, social or political space.

In general on social space see Mango C. (1981–82) "Daily life in Early Byzantium", *JÖBG* 31–32 (1981–82) 337–53; Saradi H. (2003) "Από την καθημερινότητα του πρωτοβυζαντινού αριστοκράτη", in Εθνικό Ίδρυμα Ερευνών [National Research Foundation] (2003) *Βυζαντινό κράτος και κοινωνία. Σύγχρονες κατευθύνσεις της έρευνας*, (Athens 2003) 57–87, which examines the daily life of a late antique aristocrat. For political space in general see Lavan L. (2003) "The political topography of the late antique city", in *Theory and Practice in Late Antique Archaeology*, edd. L. Lavan and W. Bowden (Late Antique Archaeology 1) (Leiden 2003) 314–37.

Imperial and Royal Palaces

It has long been stressed that imperial and royal palaces were residences, built in the tradition of elite domestic architecture. This position is fairly easy to argue in relation to extramural imperial villas at Rome and, to some extent, in relation to those at Split and Romuliana, which reflecting a style of fortified villa built in the Balkans. But intra-urban imperial palaces at Trier, Thessalonica, Constantinople, and possibly Arles, are more distinctive on a number of grounds. Firstly, they are

effectively villas within the city: huge complexes unrelated to the urban *domus* of the rest of the elite. Secondly, some architectural elements of these complexes seem characteristic, such as the use of monumental arches as entrances or the provision of integrated access to an adjacent hippodrome. Finally, their urban location underlines their status as public buildings: in three cases, they are built on the main square of the city. Written sources make clear that such palaces were used for functions more public than any great house: such as imperial accession rituals; promotion ceremonies; audiences of the consistory and senate, as well as other activities reminiscent of an enlarged Roman house, such as state banquets and morning audiences. Texts are richest for Constantinople, on account of the Book of Ceremonies and the attention that chroniclers paid to imperial events. Of the palace of Antioch and the palaces of kings at Carthage and Ravenna, we have only brief mentions. Depictions are confined to an imperial audience ceremony shown on the Missorium of Theodosius and a similar (damaged) scene from the facade of the Palace at Ravenna from St Apollinare Nuovo. Some of the rituals depicted on imperial monuments and silver plate (of sacrifice, *adlocutio*, reception and largesse) may also have taken place within the palace. Mosaic images of Justinian, Theodora and their court from San Vitale in Ravenna provide a less-structured, though especially vivid, depiction of the imperial presence at court. Perhaps unsuprisingly, Early Medieval depictions of royal ceremonies tend to reflect the late empire, though art was here perhaps more conservative than ceremony itself.

Fitting this diverse evidence together is difficult. Specific ceremonies can be reconstructed from texts, in terms of behaviour, costume and the use of some objects. These ceremonies can also be associated with different types of architectural structure—such as audience halls. But relating this information to the surviving architectural remains of palaces is very difficult, especially for Constantinople, as not enough has been excavated. Our only 'palatial' artefact group to date comes from the recent discovery of a hoard of 'imperial regalia', perhaps relating to Maxentius, from the Capitoline Hill in Rome, containing 3 lances, 4 javelins, a sceptre, glass spheres, and objects believed to have served as the bases for imperial standards. Nevertheless, we do have some idea of the nature and use of a number of ceremonial objects thanks to the survival of rule books on protocol, such as the Book of Ceremonies and the *Notitia Dignitatum*, and a large number of anecdotes concerned with breaches of protocol and the granting of special honours. The *Notitia*

Dignitaum is illustrated, and can be matched up with other depictions, allowing objects relating to palaces to be identified, particularly those found in graves and medieval sacral contexts, which sometimes reflect imperial gifts. However the total number of palace objects known is very small and occupation stratigraphy from palaces is non-existent, meaning that this spatial environment of complex ceremonies must be reconstructed largely from texts.

Syntheses: the key work is now Bauer F. A. (2005) ed. *Visualisierungen von Herrschaft. Frühmittelalterliche Residenzen—Gestalt und Zeremoniell* (Tübingen 2005). See also Duval N. (1978) "Comment reconnaître un palais impérial où royal? Ravenne et Piazza Armerina", *Felix Ravenna* 115 (1978) 29–62. Duval N. (1985) "Existe-t-il une 'structure palatiale' propre à l'antiquité tardive?", in *Le système palatial en Orient, Grèce et à Rome*, ed. E. Lévy (Leiden 1985) 463–90. Müller-Wiener W. (1990) "Zum Verhältnis von Palast und Stadt in Konstantinopel", *Ayasofya Müzesi Yıllığı* 11 (1990) 120–29. Ćurčić S. (1993) "Late antique palaces: the meaning of their urban context", *Ars Orientalis* 23 (1993) 67–90. Arce J. (1997) "Emperadores, palacios y villae", *AnTard* 5 (1997) 293–302. See the extensive bibliographies in Lavan L. (2006) "Political life in Late Antiquity: a bibliographic essay", in *Social and Political Life in Late Antiquity*, edd. W. Bowden, C. Machado and A. Gutteridge (Late Antique Archaeology 3.1) (Leiden 2006) 27–35 and especially Uytterhoeven I. (2007) "Housing in Late Antiquity: thematic perspectives", in *Housing in Late Antiquity: From Palaces to Shops*, edd. L. Lavan, L. Özgenel and A. Sarantis (Late Antique Archaeology 3.2) (Leiden 2007) 25–66.

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Praetoria

Praetoria combine residential and administrative activities in the headquarters of a government official. Legal texts are clear that they were very definitely public buildings (public property), not just houses. A large number of complexes have been proposed as the official residences of governors, but only 5 or 6 sites can be confirmed by inscriptions or other evidence: the multi-period site at Cologne, 3rd c. structures from Aquincum and Dura Europos, two separate 1st and 4th–6th c. structures from Caesarea Maritima, and a 4th c. example from Gortyn, with a possible 5th c. example from Athens. It is difficult to identify a distinctive architecture of praetoria, to separate them from the urban *domus*. The presence of offices, and of multiple courtyards opening from the street, is perhaps the only distinctive feature: in this they recall some Hellenistic palaces, which sometimes served as the *praetoria* of the very first Roman governors arriving in the East. No depictions exist, although literary evidence reveals minor details at Constantinople, Caesarea Maritima, Cologne, Antioch and Carthage, outling internal spatial divisions: chapels, residential areas, private baths, audience halls for the *secretarium*, and offices. Inscriptions at Aquincum, Dura and Caesarea provide further details: a shrine (with altars in situ), a graffito revealing the quarters of a dancing troupe and mosaic dedications of the staff of a revenue office. Almost nothing is known about object use inside these spaces, apart from a single description of a praefectural archive at Constantinople, and the discovery of shelves, perhaps for document storage, in the 'revenue office' at Caesarea Maritima. No archaeological deposits relating to everyday occupation have been recovered.

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Literary evidence: resumed in Lavan (2001). See also Mommsen T. (1900) "Praetorium", *Hermes* 35 (1900) 437–42. Cagnat R. (1907) "Praetorium", in *Dictionnaire des Antiquités grecques et romaines* 4.1 (Paris 1907) 640–42. Janin R. (1964) *Constantinople byzantine, développement urbain et répertoire topographique* (Paris 1964, 2nd ed.) 163–-66. Mango C. (1993) *Studies on Constantinople* (Collected Studies Series 394) Addenda study 1 (Aldershot 1993).

Architecture: Lavan L. (1999) "Residences of late antique governors: a gazetteer", *AntTard* 7 (1999) 135–64 with bibliography on all sites, but see especially the following entries: *Cologne*: Precht G. (1973) *Baugeschichtliche Untersuchungen zum römische Praetorium, Köln* (Rheinische Ausgrabungen 14) (Cologne 1973). *Aquincum*: Szilágyi J. (1945) "Der Legatenpalast in Aquincum", *Budapest Régiségei* 14 (1945) 143. Szilágyi J. (1955) "Wichtige Ergebenisse römerzeitlicher Ausgrabungen im Gebeir von Budapest und wertvolle Bereicherungen des Museums in Aquincum in den Jahren 1951–53", *Budapest Régiségei* 16 (1955) 393–421. *Gortyn*: Di Vita A. (1997–2001) *Gortina I-V* (Roma 1997–2001). *Athens*: Frantz A. (1988) *Late Antiquity: A.D. 267–700* (The Athenian Agora 24) (Princeton 1988). *Dura Europos*: Rostovtzeff M. I., Bellinger A. R., Burn F. E. and Welles C. B. (1952) *The Excavations at Dura Europos. Preliminary Report of the Ninth Season 1935–36. Part III: The Palace of the Dux Ripae and the Dolicheneum* (London 1952). Downey S. B. (1993), "The Palace of the Dux Ripae at Dura-Europos and 'palatial' architecture in Late Antiquity," in *Eius Virtutis Studiosi: Classical and Postclassical Studies in Memory of Frank Edward Brown* (Studies in the History of Art 43) (Washington, D.C. 1993) 183–98. *Caesarea Maritima*: Burrell (1996) above. Patrich J. (1999) "The warehouse complex and governor's palace (areas KK, CC, and NN, May 1993–December 1995)", in *Caesarea Papers 2: Herod's Temple, the Provincial Governor's Praetorium and Granaries, the later Harbour, a Gold Coin Hoard and Other Studies*, edd. K. G. Holum, A. Raban and J. Patrich (JRA Suppl. Ser. 35) (Portsmouth, R. I. 1999). Patrich J. (2000) "A government compound in Roman-Byzantine Caesarea", in *Proceedings of the Twelfth World Congress for Jewish Studies* (Jerusalem 2000) 35–44. *Ptolemais*: Kraeling C. H. (1962) *Ptolemais: City of the Libyan Pentapolis* (Chicago 1962) 141–57.

Epigraphy: *Aquincum*: see above. *Gortyn*: Guarducci M. (1929) "Le inscizioni del pretorio di Gortyna", *RivIstArch* 1 (1929) 143–89. *Caesarea Maritima*: Holum K. G. (1995) "Inscriptions from the imperial revenue office of Byzantine Caesarea Palaestinae", in *The Roman and Byzantine Near East: Some Recent Archaeological Research*, ed. J. H. Humphrey (JRA Suppl. Ser. 14) (Ann Arbor 1995) 333–46. Lehmann C. M. and Holum K. G. (2000) *The Greek and Latin Inscriptions from Caesarea Maritima* (The Joint Expedition to Caesarea Maritima Excavation Reports 5) (Boston 2000).

Law Courts

Law courts have left no stratigraphic trace. Sources are mainly literary texts or depictions. Architectural evidence for spatial organisation is slight, as law courts did not have their own specific and specialised architectural setting. Basilicas were popular, but other settings, such as baths, could also be used: the presence of late tribunals are one likely indicator of judicial activity: these occur in the eastern portico of the Upper Agora of Ephesus, and in the 'Byzantine City Bath' at Ptolemais, as well as being attested by texts on the *agorai* of Constantinople. Depictions, mainly of 6th c. date, include representations of the trial of Christ, the judgment of Solomon and some martyr trials. These images, which include many common elements, tend to represent the clothing and artefacts of the Late Roman law court. John Lydus provides some artefactual and procedural details of the courts of Constantinople. Rich material also comes from accounts of trials: these include some ordinary criminal hearings and also acts of Christian martyrs, which can provide some credible details if used with caution. The interpretation of literary sources and pictorial evidence is complex. Nevertheless, a general reconstruction is possible: all or part of the proceedings might take place in private (as a *secretarium*) inside curtains and gates which could be withdrawn to create an open court, but many sessions, especially when trying criminal cases, were held in public, into the 6th c. A.D. It is possible to reconstruct the personel present in the law court, their dress, some outlines of procedure, the torture apparatus, furniture and the symbolic objects used. Thus we hear of railings used to close the inner part of the court, and curtains for private sessions. The presence of *imagines* was important, as were official pens and ink pots granted by the emperor, and a dignified white-clothed table to hold them; the Bible also appeared in court from the 6th c. as a powerful symbol, on which oaths were sworn. Of practical objects, we know of the wax tablets and stylus used by the court-copyist, imperial constitutions used by lawyers and, from Constantinople, of a water clock used for timing speeches.

Syntheses: Lavan L. (2003) "The political topography of the late antique city", in *Theory and Practice in Late Antique Archaeology*, edd. L. Lavan and W. Bowden (Late Antique Archaeology 1) (Leiden 2003) 314–37. Lavan L. (2001) *Provincial Capitals of Late Antiquity* (Ph.D. diss., Univ. of Nottingham 2001) 221–42.

Architecture: Balty J. C. (1991) *Curia Ordinis: recherches d'architecture et urbanisme antiques sur les curies provinciales du monde Romain* (Académie royale de Belgique. Mémoires de la classe des beaux-arts. Collection in 4°: 2e série 15.2) (Brussels

1991) 408–409 and elsewhere. Walthew C. V. (2002) *A Metrological Study of the Early Roman Basilicas* (Lewiston 2002).

Tribunals: In basilica at Cuicul: *AE* (1946) 107 = *CRAI* (1943) 381–83 (A.D. 364–67), Février P. A. (1971) *Djemila* (Alger 1971). In a stoa: Alzinger W. (1970) "Ephesos B. Archäologische Teil", in *RE Suppl.* XII (Mainz 1970) 1601. In a bath: Kraeling C. H. (1962) *Ptolemais: City of the Libyan Pentapolis* (Chicago 1962) 166. On agorai at Constantinople: on Augusteum, late 4th-early 5th c.: Vita Olympiadis 5 and Not. Const. 3.14 (Reg. 2); on Forum of Constantine, A.D. 425: Not. Const. 4.13 (Reg. 3); on Forum of Arcadius (sometime in or before 8th c.): *Parastaseis* 71.

Literary evidence: Jones A. H. M. (1964) *The Later Roman Empire*, vol. 1 (1964) 517–22. Lib. *Or.* 22, *Or.* 33, and *Or.* 56. Joh. Chrys. *Hom ad pop. Ant.* 12.2. Joh. Lydus *Mag.* esp. 2.16. Dionisotti A. C. (1982) "From Ausonius' schooldays? A schoolbook and its relations", *JRS* 72 (1982) 83–125, esp. 104–105. Selected Acts of Martyrs, not straightforward to use: Musurillo H. (1972) *The Acts of the Christian Martyrs. Introduction, Texts and Translations* (Oxford 1972); von Gebhardt O. L. and von Dobschütz E. (1911) *Die Akten der Edessenischen Bekenner Gurjas, Samonas und Abibos* (Text und Untersuchungen zur Geschichte der altchristlichen Literatur 37.2) (Leipzig 1911); *Acta purgationis Felicis* in Optatus Milevitanus *App. 2* (CSEL 26). For the courts of Constantinople, see Janin R. (1964) *Constantinople byzantine, développement urbain et répertoire topographique* (Paris 1964, 2nd ed.) 174–75.

Pictorial: *Rossano gospels*: Loerke W. C. (1961) "The miniatures of the trial in the Rossano Gospels", *ArtB* 43 (1961) 171–95. *Brescia casket, ca. A.D. 360–370 (Brescia: Museo Cristiano)*: Tkacz C. B. (2002) *The Key to the Brescia Casket: Typology and the Early Christian Imagination* (Collection des Études Augustiniennes 165) (Paris 2002). *Cathedra of Maximian, Ravenna*: Ruprechts-Schadewaldt F. (1970) *Die Ikonographie der Joseph-Szenen auf der Maximian-Kathedra in Ravenna* (Heidelberg 1970). Morath W. G. (1940) *Die Maximianskathedra in Ravenna* (Freiburg 1940). *Egyptian martyr scene*: Situla in the British Museum, London: no. 267.

Prisons

Of prisons we know little. We have no securely identified architectural evidence. Texts suggest a variety of structures could be used, depending on local contingencies. At Antioch the prison used by the *Comes Orientis* (inherited from the city council) was open to the sky, whilst others were windowless. On occasion, prisons were broken into to rescue inmates, which suggests they many, and perhaps most, were unfortified. One prison had an icon of the Virgin in the cell. Prisoners could be shackled and torture equipment might be found here. High status prisoners might be housed elsewhere: Libanius awaited trial at Nicomedia in a perfume shop, whilst the curiales of Antioch were, after initial discomfort, allowed to stay in the bouleuterion and its gardens.

Syntheses: Krause J.-U. (1996) *Gefängnisse im Römischen Reich* (Stuttgart 1996) 316–44. Lavan L. (2001) *Provincial Capitals of Late Antiquity* (Ph.D. diss., Univ. of Nottingham 2001) 242–46. Lavan L. (2001) "The praetoria of civil governors in Late Antiquity", in *Recent Research in Late Antique Urbanism*, ed. L. Lavan (JRA Suppl. Ser. 42) (Portmouth, R. I. 2001) 54–55. Hilner J. D. (2007) "Monastic imprisonment in Justinian's Novels", *JECS* 15.2 (2007) 205–37.

Literary evidence, selected: *Cod. Theod.* 9.3 (various), 9.11.1 (A.D. 388), *Cod. Iust.* 1.4.23 (A.D. 529), 9.3–9.5 (various). Cassiod. *Variae* 11.40. *Joh. Chrys. *Hom ad pop. Ant.* 13.6; *Hom. in Jo.* 60.4 (PG59.333), Lib. *Or.* 1.68; Synesius *Ep.* 41, Basil *Ep.* 42. Victor of Vita 2.28–32. *Constantinople*: Janin R. (1964) *Constantinople byzantine, développement urbain et répertoire topographique* (Paris 1964, 2nd ed.) 166–70. Proc. *Wars* 1.24.3–8, Malalas 18.146. *Alexandria*: Sozom. *Hist Eccl.* 5.7, 6.19; Socrates *Hist Eccl.* 4.22. *Antioch*: Lib. *Or.* 22.29–31, *Or.* 45. Downey G. A. (1961) *History of Antioch in Syria from Seleucus to the Arab Conquest* (Princeton 1961) 628, with n.12.

Curia/Bouleuteria

City councils acted as the executive political authority within Eastern cities until sometime between A.D. 430 and 460, after which time they continued to exist as an institution but do not seem to have met as an assembly. The date at which western councils ceased to meet probably varied, and is difficult to fix: they survived most strongly in Italy, at least until the reconquest. The meeting of the curia was one of the most imperial political activities within Roman cities. It took place in a specialised building type (*curia* in the West, *bouleuterion-odeon* in the East), which was usually found in a prominent place on the central square of a city. Most of these structures were built in the Early Imperial period. A number were repaired in both East and West in the 4th c., though a few were built anew, at Rome, Constantinople, and Sabratha. That of Lepcis was relocated within a disused temple. Both new buildings and repairs show that the internal spatial organisation had not changed: an arc of stone benches in the East, and an open rectangle of low steps (for wooden seats) in the West. Well-preserved *bouleuteria* excavated at Sagalassos and Nysa show that even through the 4th c. traditional statues from earlier centuries continued to decorate these halls. Conversely, at Sabratha and at Constantinople, new statues continued to be added during the period. Epigraphic finds in the curia at Timgad attest to the display of decrees regulating its organisation, whilst Libanius mentions that portraits of local notables were displayed in the bouleuterion at Antioch. The controversy surrounding the Altar of Victory in the curia at Rome provides glimpses of the political ritual

involving a (mobile) altar, and a traditional statue, even in the late 4th c., although the former was soon removed. Finally, a selection of textual evidence—legal codes, Libanius and the minutes of meetings from Rome and Oxyrhnchus—reveal the people present, their behaviour, dress and procedure. No depictions exist which might help us to approach object use in any detail.

Syntheses: Lavan L. (2003) "The political topography of the late antique city", in *Theory and Practice in Late Antique Archaeology*, edd. L. Lavan and W. Bowden (Late Antique Archaeology 1) (Leiden 2003) 314–37. Balty J. C. (1991) *Curia Ordinis: recherches d'architecture et urbanisme antiques sur les curies provinciales du monde Romain* (Académie royale de Belgique. Mémoires de la classe des beaux-arts. Collection in 4°: 2e série 15.2) (Brussels 1991), which does not deal with the late antique use of buildings. Gros P. (1996) *L'architecture romaine du début du III^e siècle av. J.-C. à la fin du Haut-Empire. Volume 1: les monuments publics* (Paris 1996) 261–69.

Architecture, newly built: *Rome*: Bartoli A. (1963) *Curia Senatus: lo scavo et il restauro* (Rome 1963) 42–44, 51–60. Fraschetti A. (1999) *La conversione da Roma pagana a Roma cristiana* (Rome and Bari 1999) 132–236, esp. 207–208. *Lepcis Magna*: entry in catalogue of Balty (1991) above. *Sabratha*: Bartoccini R. (1950) "La curia di Sabratha", *QAL* 1 (1950) 29–35. For the mosaic dating, see also Kenrick M. P. (1986) *Excavations at Sabratha, 1948–51* (London 1986) 29–34, 80–87. *Constantinople*: Entries in Müller-Wiener W. (1977) *Bildlexikon zur Topographie Istanbuls: Byzantion—Konstantinopel—Istanbul bis zum Beginn des 17. Jahrhunderts* (Tübingen 1977). Janin R. (1964) *Constantinople byzantine, développement urbain et répertoire topographique* (Paris 1964, 2nd ed.) 154–56. Mango C. (1993) *Studies on Constantinople* (Collected Studies Series 394) (Aldershot 1993) Addenda study 1. Berger A. (1995) "Die Senate von Konstantinopel", *Boreas* 18 (1995) 131–42. Stichel R. H. W. (2000) "Sechs kolossale Säulen nahe der Hagia Sophia und die Curia Justinians am Augusteion in Konstantinopel", *Architectura* 30 (2000) 1–25.

Architecture, repairs: *Exeter*: *basilica* and *curia* extended: Bidwell P. T. (1979) *The Legionary Bath-House and Basilica and Forum at Exeter* (Exeter 1979) 104–109. *Rome: curia senatus* restored three times: rebuilt by Diocletian, in the 420s after Alaric's sack, and in the early 6th c. according to literary sources and inscriptions from the site: *Chronicle of 354 A.D.* 148; Aur. Victor *Caes.* 13.5; Cass. *Var.* 9.7.2. Tortorici E. (1993) "Curia Julia", in *Lexicon Topographicum Urbis Romae* 1, ed. E. M. Steinby (Rome 1993) 332–34. *Belalis Maior*: *CIL* VIII 14436 = *ILS* 5518 ; Lepelley C. (1979) *Les cités de l'Afrique romaine au Bas-Empire. Vol 1: La permanence d'une civilisation municipale* (Études Augustiniennes Série Antiquité 80) (Paris 1979) 79–80; Mahjoubi A. (1978) *Recherches d'histoire et d'archéologie a Henchir El-Faouar: la cité des Belalitani Maiores* (Tunis 1978) 149. *Tiddis*: Salle B on the forum: Berthier A. (2000) *Tiddis, cité antique de Numidie* (Paris 2000) 69. Balty (1991) 64–67. *Pupput*: The curia was restored in A.D. 282, see *CIL* VIII, 24095 = *ILS* 5361. Lepelley (1979) *Vol. 2* 302. *Lepcis Magna*: Balty (1991) 39–42. Bartoccini R. (1950) "La curia di Sabratha", *QAL* 1 (1950) 43–45. *Nysa*: Idil V. (1999) *Nysa and Acharaca* (Istanbul 1999) 119–21. *Antioch*: Downey G. A. (1961)

History of Antioch in Syria from Seleucus to the Arab Conquest (Princeton, N. J. 1961) 453–54. Downey G. (1959) "Libanius' oration in praise of Antioch (Oration XI)", *ProcPhilSoc* 103 (1959) 652–86. *Ephesus*: Bier L. (1999) "The bouleuterion at Ephesos: some observations for a new survey", in *Steine und Wege. Festschrift für Dieter Knibbe zum 65. Geburtstag*, edd. P. Scherrer, H. Taeuber, H. Thür (Österreichisches Archäologisches Institut Sonderschriften Band 32) (Vienna 1999) 7–18. *Megalopolis*: Lauter H. and Spyropoulos T. (1998) "Megalopolis 3. Vorbericht 1996–1997", *AA* (1998) 426–38.

Internal fittings: *Rome*: Fraschetti A. (1999) *La conversione: da Roma pagana a Roma cristiana* (Rome 1999) 207–208. See also the Altar of Victory debate in Croke B. and Harries J. (1982) *Religious Conflict in Fourth Century Rome* (Sydney 1982). *Sabratha*: for 4th c. honorific statues see Bartoccini (1950) above. *Sagalassos*: Lavan L. (forthcoming) "Epigraphic context at Sagalassos" (forthcoming). *Nysa*: Kuruniotis K. (1921–22) "Anaskafai en Nyse," *ArchDelt* 7 (1921–22). *Timgad*: three 4th c. decrees, relating to membership of the *curia* and interaction with provincial government: Lepelley (1979) above 456–68. Chastagnol A. (1978) *L'album municipal de Timgad* (Antiquitas III, 22) (Bonn 1978). *Antioch portraits*: Lib. *Or.* 2.36, 31.36–40.

Literary evidence: *Rome*: assembled in Bauer F. A. (1996) *Stadt, Platz und Denkmal in der Spätantike. Untersuchungen zur Ausstattung des öffentlichen Raums in den spätantiken Städten Rom, Konstantinopel und Ephesos* (Mainz 1996) 7–19. See also Fraschetti (1999) 131–236. *Constantinople*: Janin R. (1964) *Constantinople byzantine, développement urbain et répertoire topographique* (Paris 1964, 2nd ed.) 154–56. *Antioch*: Libanius descriptions resumed by Petit P. (1955) *Libanius et la vie municipale de Antioch* (Paris 1955) 64-65, but especially Lib. *Or.* 22.31, 2.487–88. *Minutes*: for the Roman Senate, see preface of the *Codex Theodosianus*; for Oxyrhynchus, see Jones A. H. M. (1964) *The Later Roman Empire*, vol. 2 (Oxford 1964) 729–30 based on *P. Oxy.* 2110; for Hermopolis Magna, see Van Minnen P. and Worp K. A. (1989) "Proceedings of the Council of Hermopolis A.D. 322", *ZPE* 78 (1989) 139–42, discussing *P. Cairo* inv. 10622. Bowman A. K. (1971) *The Town Councils of Roman Egypt* (Toronto 1971) for an idea of the business of the councils. *Altar of victory debate*: Amb. *Ep.* 17 and Sym. *Rel.* 3.

Forts

Our understanding of military space, through integrated studies of stratigraphic, artefactual and architectural evidence, is still in its early stages. The internal evolution of fort plans has mainly been discussed as evidence of reduced unit-size and/or an increasingly defensive mentality, by Coelle, Nicasie and others. Recently, some productive sites in Britain, such as South Shields and Birdoswald, have helped scholars like Bidwell explore changing fort plans in more detail, and with a much less pejorative eye. The Roman fort underwent considerable internal change during the 4th–6th c., when much of the characteristic spatial pattern established during the Principate was abandoned. Nevertheless barracks, *prinicipia* buildings and

granaries can still be distinguished architecturally within forts. In new 4th c. forts, barracks were sometimes built lining axial colonnaded streets, or set around the edges, although some forts were almost entirely empty of masonry structures—with perhaps tents taking their place. The predictability of earlier plans disappeared, with layout becoming very irregular in the 6th c. Some of the specialised buildings of the Early Imperial period mutated or disappeared. These changes might well have been associated with new military conditions, such as changing unit strengths, or families of married soldiers living inside the walls.

There are evidential problems with both architectural and artefactual material, such as truncation of Late Roman deposits (sometimes by archaeologists interested in earlier layers), and limited modern excavation. Few occupation or useful abandonment deposits have been recovered from inside buildings, and these are confined to barracks and granaries. The former give us glimpses of soldiers' domestic assemblages as well as occasional pieces of weaponry and armour, whilst the latter (two or three sites) give us some idea of storage assemblages in very particular situations. The literary sources are also not especially informative about daily life in forts; the Abinnaeus Archive gets closest to this, but is more about relations between soldiers and others in the 4th c. Depictions of soldiers, and their graves, give us some idea of the changing equipment and uniform of the military, though both are likely to represent soldiers at their best rather than their everyday appearance. Hoards of military items are so far not known for the late empire, except the water deposition of weapons in Free Germany, which has little to do with everyday object use.

Syntheses: Alston R. (1995) *Soldier and Society in Roman Egypt: A Social History* (London 1995). Brulet R. (1990) *La Gaule Septentrionale au Bas-Empire: occupation du sol et défense du territoire dans l'arrière-pays du Limes aux IV^e et V^e siècles* (Trierer Zeitschrift 11) (Trier 1990). Dabrowa E. (1994) ed. *The Roman and Byzantine Army in the East* (Krakow 1994).

Architecture, syntheses: von Bulow G. and Milcheva A. (1999) edd. *Der Limes an der unteren Donau von Diokletian bis Heraklios. Vortrage der internationalen Konferenz Svishtov, Bulgarien (1.–5. September 1998)* (Sofia 1999). Isaac B. H. (1992) *The Limits of Empire: the Roman Army in the East* (Oxford 1992). Whittaker C. R. (1994) *Frontiers of the Roman Empire: A Social and Economic Study* (Baltimore 1994). Fentress E. (1979) *Numidia and the Roman Army: Social, Military and Economic Aspects of the Frontier Zone* (BAR Int. Ser. 53) (Oxford 1979). Daniels C. M. (1987) "The frontiers: Africa", in *The Roman World*, ed. J. Wacher (London 1987) 223–65. Gregory T. (1992) "Kastron and diateichisma as responses to Early Byzantine frontier collapse", *Byzantion* 62 (1992) 235–53. Kennedy D. L. (2000) *The Roman Army in Jordan* (London 2000). Pearson A. (2002) *The Roman Shore Forts: Coastal Defences of Southern Britain* (Stroud 2002). Konrad M. (2001) *Der spätrömische Limes*

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For fora/agorai, political processions, entertainment buildings and interaction with the ruler see the next chapter.

SOCIAL SPACE IN LATE ANTIQUITY

Luke Lavan

Fora/Agorai

Whilst there are some new fora/agorai of 4th–5th c. date, and much archaeological evidence of structural repair to porticoes and paving, it is difficult to relate this evidence to their everyday function. Some rare traces do survive—of market stalls (Cherchell and Sagalassos), a price list (Aphrodisias) or *topos* inscriptions (from Sagalassos and Aphrodisias) indicating what sold. There are no late antique depictions to compare with the forum scene from Pompeii. We have only an early 4th c. view of the northern side of the Forum Romanum, with Constantine giving an oration, and a distant, schematic early 5th c. view of the Forum of Constantine in the Eastern capital. Usually one is obliged to rely on literary sources, which are especially rich for the fora/agorai of Antioch and Constantinople, although Arles, Alexandria, Gaza, Emesa and Rome receive significant mention. When this evidence is combined with epigraphic evidence and the archaeology of repair, a picture emerges of the continuity of fora/agorai as political, social and commercial centres to the early 5th c. in the West, and into the 6th in the East, wherever cities were still flourishing. However, beyond this time, agorai often ceased to be the main focus of city life. Salesmen, customers, market stalls and their produce are described by texts, and the occasional inscription. The only stalls to have produced associated archaeological traces seem to be those of moneychangers from the destruction of the Basilica Aemilia in Rome in A.D. 410, and the small change of stall-holders, that slipped down between paving cracks at Iol Caesarea.

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L. Lavan, E. Swift, and T. Putzeys (edd.) *Objects in Context, Objects in Use* (Late Antique Archaeology 5 – 2007) (Leiden 2007), pp. 129–157

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Archaeology: *Stalls at Cherchel*: Potter T. W. (1995) *Towns in Late Antiquity: Iol Caesarea and its Context* (Oxford 1995) 36–39. Benseddik N. and Potter T. W. (1993) *Fouilles du Forum de Cherchel 1977–1981* (BAAlg suppl. 6) (Algiers 1993). *Stalls at Sagalassos*: Lavan L. (forthcoming) "The agorai of Sagalassos in Late Antiquity", *AnatStud* (forthcoming).

Epigraphy: Well-preserved epigraphic fields, with late antique statues and *topos* inscriptions for shops and stalls have been recorded at Aphrodisias and Sagalassos: Roueché C. (1989) *Aphrodisias in Late Antiquity* (London 1989) 20–21, 41, 62, 64, 77 (honorific), 191–93, 195–97, 213 (commercial). Lavan (forthcoming) above. Rome also provides high quality preservation in the Forum Romanum, with much late material: Machado C. (2006) "Building the past: monuments and memory in the Forum Romanum", in *Social and Political Life in Late Antiquity*, edd. W. Bowden, C. Machado and A. Gutteridge (Late Antique Archaeology 3.1) (Leiden 2006) 157–92. A textual record of statues in fora/agorai exists for Constantinople: Bassett S. (2004) *The Urban Image of Late Antique Constantinople* (Cambridge 2004) 68–71.

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Monumental Streets and Processions

Monumental streets were amongst the most popular form of public building in Late Antiquity, with new or restored examples known from imperial and provincial capitals and from many lesser-ranking cities. The peak period for their construction was under the reign of Justinian. Arches, tetrapyla, honorific columns and cross monuments played an important role in such avenues. However, it is difficult to relate most street architecture directly to the everyday use of street space, although a concern to provide amenities to shoppers and to provide representational architecture as a backdrop for processions is intrinsic to their design. Numerous political and religious processions took place in monumental streets during Late Antiquity: these are well-documented in terms of their personnel, dress, choreography and their use of objects. The capital had its distinctive ceremonies: triumphs, consular accessions, imperial accessions, marriages and funerals, along with reception of ambassadors, and choreographed processions between the different monuments, involving all types of officials. Provincial capitals and smaller cities would on occasion see the *adventus* of emperors, bishops or imperial officials, along with daily movements of patrons and their households, or liturgical and festival assemblies of pagan or Christian groups, and also punishment and execution parades, each with their distinctive dress and objects.

Our knowledge of these processions is almost entirely dependent on literary sources, especially accounts of actual processions, or legal texts which sought to regulate them. Neverthless, some depictions of *adventus* processions exist, usually involving the arrival of relics, whilst inscribed acclamations can give clues about where official greetings were given. From all this information come glimpses of the emperor in various costumes, with his military escort in shining armour, holding their dragon banners high; or of governors in official carriages, accompanied by white robed officials; or of civic reception parties, ordered by class and rank, chanting rhythmic greetings, whilst the incoming dignitaries

navigated monumental avenues decorated by garlands and lights. The daily movements of the wealthy from their house to the agora involved a hierarchical display of domestic servants, perhaps in recognisable house costume, as well as clients, with the patron in his jewelled robes on horseback, whilst a baton-wielder cleared the way before the group. Funeral processions, traditionally held at night, began to be held during the day, especially for Christians: the cortege passed through the main squares and along the roads of the city, going out to the necropolis. It was accompanied by family, friends and professional mourners, preceded by manumitted slaves wearing the 'liberty cap', and assisted by clergy, whose activities Justinian sought to regulate.

Pagan religious processions are attested for the 4th c. and very early 5th c. Scenes of animal victims being led to sacrifice are depicted on Tetrarchic reliefs at Rome and Thessalonica and are described in literary sources under Julian at Antioch. Julian was himself involved in parades of sacred images through the streets. Festival processions, sometimes Dionysiac in nature, are attested in the 4th c. East at Athens, Antioch and elsewhere, whilst Augustine described one in A.D. 408 at Calama in Africa. Christian processions seem to have started spontaneously in the mid-4th c., with the adoption of the *adventus* by bishops, the transfers of relics, public demonstrations on occasions of conflict, and, eventually, planned liturgical processions between churches. Under Justinian, their appearance was regulated by a law, which gives us some idea of their appearance, as do descriptions of actual processional events. The dress of the clergy was distinctive, as were their hymns, incense and the use of precious crosses, carried at the head of the group. Yet much else was borrowed from secular processions: such as the shouting of acclamations, the ordering of participants by precedence, the use of candles, or occasionally the use of government carriages. A few depictions exist: of an *adventus* of relics at Constantinople and at Vienne, of an *adventus* of a governor from Aquileia, and of an *adventus* of Constantine on his arch in Rome.

Reconstruction of more mundane everyday activities in streets is possible using anecdotes from chronicles, personal letters and saints' lives, as well as *topos* inscriptions and late gameboards surviving on some eastern sites. A topographical mosaic depicting a street scene at Antioch survives for the mid-5th c. This shows a range of social and commercial activity (dice-playing, shop-front selling) amidst colonnaded shops and honorific statues, which would not seem out of place in earlier centuries. Neither here, nor in the archaeology of prosperous

eastern cities, is there an impression of disordered encroachment on major avenues. It looks increasingly likely that, in the East at least, late 'encroachment' of streets may have been exaggerated due to a misunderstanding of Late Roman legislation and over-reliance on a few poorly dated archaeological examples.

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Archaeology: *Statuary*: particularly good in the case of Aizanoi and Ephesos [Embolos] (above). *Topos inscriptions outside shops*: Palmyra: Browning I. (1979) *Palmyra* (London 1979) 138. Perge: '+ topos thermopoulou' seen by L. L. on colonnaded street in 2005. *Professionally-cut Gameboards*: are present at Sagalassos, Sardis (both cut onto a former statue base), and Xanthos. Letters numbering shops are known from Beiruit: http://www.york.ac.uk/depts/arch/beirut/souksindex.htm, last accessed 30/08/2007.

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Pictorial: Most pictoral evidence of streets (on maps etc.) just depicts architecture, empty of people. But the following street scenes represent everyday life (in the case of Yakto) or processions. *Yakto mosaic*: Lassus J. (1934) "La mosaïque de Yakto", in *Antioch on the Orontes* I, ed. G. W. Elderkin (Princeton 1934) 114–56. Levi D. (1947) *Antioch: Mosaic Pavements*, 2 vols. (Princeton 1974). Lassus J. (1969) "Antioche en 459, d'après la mosaïque de Yaqto", in *Apamée de Syrie. Bilan des recherches archéologiques 1965–68. Actes du colloque tenu a Bruxelles les 29 et 30 Avril 1969*, ed. J. Balty (Fouilles d'Apamée de Syrie Miscellanea 6) 137–46. *Column of Arcadius*: depiction of the Mese at Constantinople with few people, but many statues: Freshfield E. (1921–22) "Notes on a vellum album containing sketches of public buildings and monuments drawn by a german artist", *Archaeologica* 72 (1921–22) 87–104. *Trier Ivory*: depiction of the adventus of relics: Holum K. and Vikan G. (1979) "The Trier Ivory, adventus ceremonial and the relics of St Stephen", *DOP* 33 (1979) 115–74. *Vienne relief*: at Musée d'Archéologie Nationale at St Germain-en-Laye, France. *Aquileia frieze*: depiction of the cortege of the governor: Museo Archeologico di Aquileia. *Arch of Constantine*: depiction of the military adventus of Constantine into Rome: l'Orange H. P. and von Gerkan A. (1939) *Die spätantike Bildschmuck des Konstantinsbogens* (Berlin 1939) 72, Taf. 3b, 12–13. Giuliani L. (2000) "Des Siegers Ansprache an das Volk. Zur politisichen Brisanz der Frieserzählung am Constantinsbogen", in *Rede und Redner*, edd. C. Neumeister and W. Raeck (Möhnensee 2000) 274ff. *Arch of Galerius*: depiction of an imperial sacrifice procession: Laubscher H. P. (1975) *Der Reliefschmuck des Galeriusbogens in Thessaloniki* (Berlin 1975) pl. 9.1, 29.1–2, 40–41.1–2. *Rome, Decenallia monument*: depiction of the same: Kähler H. (1964) *Fünfsäulendenkmal für die Tetrarchen auf dem Forum Romanum* (Cologne 1964). *CIL* 6.1205. Mayer E. (2002) *Rom ist dort, wo der Kaiser ist: Untersuchungen zu den Staatsdenkmälern des dezentralisierten Reiches von Diocletian bis zu Theodosius II* (Monographien des Römisch-Germanisches Zentralmuseum Mainz, Forschungsinstitut für Vor- und Frühgeschichte 53) (Mainz 2002) 180. L'Orange H. P. (1938) "Ein tetrarchisches Ehrendenkmal auf dem Forum Romanum", *RM* 53 (1938) 1–34.*Gargaresch, Tripoli*: Fresco of a Candlebearer (in funeral procession) from the Tomb of Aelia Arisuth, 4th c. A.D.

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Baths

A detailed synthesis focused on bathing in Late Antiquity has not been undertaken. This is despite some of the largest bath complexes being of 4th to 6th c. date. Most of these are in imperial capitals, though some large eastern cities, such as Alexandria, Antioch, and Scythopolis, also saw new thermae constructed in this period. New baths, though relatively common, were usually smaller than in the Early Imperial period, whilst many old complexes fell out of use. Conversely, small private baths became more common within cities. Within bath buildings, the uses of the functional rooms are obviously easy to reconstruct, as each played a specific role in the cycle, about which we are well-informed. The uses of non-functional rooms are harder to determine. Direct descriptions of bathing are fewer into the 6th c., although allusions in literary sources are frequent, including references in school books. That

the social aspect of bathing (and with it dress and retinue) continued to be important in Late Antiquity is clear in literary sources from Ammianus to Procopius, and from depictions of the wealthy and their bathing attendants at Piazza Armerina. Both mosaics and texts reveal that the essential material items of bathing (the strigil and oil pot, buckets, and clean robes) did not change. Some of these items, such as toilet caskets, buckets (*situlae*) and hand-washing sets, are preserved as a group as part of silver hoards (e.g. in the Esquiline Treasure and the Sevso Treasure), underlining that the display of wealth was as important during bathing as on other occasions in the daily cycle of the rich.

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Pictorial evidence: *Piazza Armerina*: mosaics and frescoes in bath area showing i) rich woman, two children and two servants arriving in baths, who are carrying clothes and equipment for massaging with oil, ii) woman after bathing being dried, iii) man preparing for bathing with two slaves, iv) men being oiled, showing strigil, bucket, oil flask: Carandini A., Ricci A. and de Vos M. (1982) *Filosofiana. La villa di Piazza Armerina* (Palermo 1982) 326–73. *Esquiline Treasure casket*: probably depicting a procession to a bath building as the casket carried in the scene was to hold bathing equipment.

Literary evidence, very selected: Amm. Marc. 28.4.9, (procession to bath) 28.4.19 (attendants, towels, robes etc), Theod. *Hist eccl.* 4.13 (bishop bathing with servants in public bath), Procop. *Vand.* 2.163 (social display in baths), Lib. *Or.* 51–52 (reception), Socrates *Hist. eccl.* 6.22 (frequency), Greg. Naz. *Or.* 43.15 (socialising), August. *Conf.* 2.3.6 (nudity), Leont. N. *v. Sym* 4 (segregated sexes), Claudian *Carmina Minora* 26 ('Aponus', describing a healing bath). For more literary evidence, see Ward R. B. (1992) "Women in Roman Baths", *HTR* 85 (1992) 125–47.

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Entertainment Buildings

Few entertainment buildings were built during Late Antiquity, but evidence for the continued use of these structures is abundant in Mediterranean regions. The only new 'stadium' of the period (of mid-5th c. date) at Antioch, is usually interpreted as a horse training ground. Repairs to stadia are only known in two cases, at Olympia and Antioch, which hosted their own Olympic Games until A.D. 393 (Cedren. *Hist Compend.* 323D) and 520/21 (Malalas 17.13) respectively.

Athletic festivals were very rare by the 4th c., and especially from the 5th c., but athletics did survive as a form of popular entertainment within wider shows, as a description of games from 6th c. Oxyryhnchus makes clear. Details of athletic games are few: we have a single mosaic depiction from early 4th c. Africa (Batten Zamour), and accounts from Antioch and Apamaea, where the Olympic Games were witnessed by Libanius. Here the games included poetry, rhetoric and a public feast, as well as wrestling, boxing and running. The same three sports are attested together as a group on the Batten Zamour mosaic. Here athletes compete naked, except during boxing, when they wear gloves, and in a torch-carrying race, when they have helmets; the adjudicators of wrestling and boxing hold sticks and wear togas; victors carry off palms, crowns, money and ?belts; a trumpeter is also present. Acrobats shown on a diptych of Anastasius now wear loin cloths.

Gladitorial games seem to have come to an end in the early 5th c, in both East and West. Venationes lasted to at least A.D. 537 at Constantinople (Just. *Nov.* 105.1) and were still attested in the West in A.D. 523. Amphitheatre games now often took place in converted theatres. We also have structural details of 4th c. restorations of the Colosseum, and from elsewhere in Italy and Africa. For Gladitorial games, the pictoral record is limited, as mosaic artists neglected this as a theme from the late 3rd c. The image from the Villa Borghese is spectacular, showing a range of distinctively costumed combatants familiar from earlier centuries. At Piazza Armerina a possible gladiatorial image only survives in part in the tepidarium of the baths: although the context could be athletic, some participants carry shields and protective armour is shown on one arm. In terms of both athletics and gladiatorial combats we have few if any finds of sporting equipment or arms and armour. Nevetheless, what is depicted seems somewhat similar to earlier centuries– but the limited number of images and the lack of finds make it hard to judge the level of iconographic conservatism. For *venationes* we have a description by Cassiodorus, and depictions of animal games on mosaics (e.g. the early 4th c. mosaic of the Villa Borghese), and, especially, on consular diptychs. The latter show men trapped in cages, limited combat with animals (lions, bears, deer), and athletes doing their best to escape dangerous beasts, by lassooing them or by hiding behind screens.

Theatres continued to be popular setting for dramatic productions in many Mediterranean cities, being used for mimes, festivals and water

spectacles. Only a single new theatre (at Ptolemais) has been suggested for the period, though late repairs to theatres are common in the East, with some orchestras converted into basins. From theatre shows we have some details of costume and performances (from the Maiuma rituals, to parodies of Christian rituals, to scandalous tales about Theodora), but nothing on specialised objects used. An ivory statuette from late 3rd c. Milan and depictions of troupes of actors on diptychs of Anastasius reveals that masks were still used, as in Nonnus' *Dionysiaca* (32.60–63). The latter seems to show the use of distinctive costume types, which would have been as important to the plot as props (which we hear of from accounts of the stage). The female dancers depicted on the obelisk of Theodosius or the monuments of Porphyrius from the hippodrome of Constantinople are well-clothed. The existence of late antique inscriptions marking seating plans and 'seats of honour' allow us to reconstruct something of the audience. Theatres were also still used for popular political meetings/announcements to the people, in the 4th and perhaps the early 5th c., at least in the East.

We are very well informed about the circus, thanks to it being a major political arena and the favourite sport of the masses. New circuses are known from imperial capitals (Rome (via Appia), Sirmium, Milan, Thessalonica, Antioch, Ravenna) and circuses were also renewed at Merida and in Constantinople. Internal fittings dating to this period can only be studied at Rome, or on the spina of the hippodrome of Constantinople. For the latter we also have a number of depictions and textual descriptions that survive (ranging from chronicle accounts of political ceremonies to odes for athletes), as well as honorific monuments to the victors, whose inscriptions are also recorded in the *Palatine Anthology*. Spina decorations are best represented on mosaics from Piazza Armerina and Africa, and on the diptych of the Lampadii. The popularity of circus themes in 4th c. mosaics and wall paintings in the West provides a number of less detailed depictions, which may perhaps be iconographically stereotyped. But from these images, and from relief monuments, there is little to suggest change in basic equipment used by drivers during this period. For Constantinople, it is possible to reconstruct the seating arrangements, the dress of those present in the hippodrome (as on the Obelisk of Theodosius), and a little of the protocol and organisation of the games, along with the chants of the crowd, the use of organs, the appearance of chariots, and the flag raised to announce the races. A mosaic from Piazza Armerina

reveals the presence of victory palms and trumpets. Texts allow us to reconstruct the basic details of a range of political ceremonies in the hippodrome, from the parading of a golden statue of Constantine in a chariot, to the climax of military triumphs, when captive kings or victorious generals did obeisance before the imperial box. Two pieces of 6th c. evidence reveal that circus entertainments could be very mixed: a hippodrome programme from Oxyrhynchus (*P. Oxy.* 2707) lists, apart from many chariot races, intervals featuring a procession, singing dancers, a hunt of a gazelle by hounds, mimes, and a troupe of athletes, whilst the *Strategikon* (3.101–107) describes musicians and mimes as well as charioteers performing during official celebrations in the hippodrome.

Of other artistic displays, we hear of the poetry contests in which Augustine participated at Carthage, after which the proconsul placed a crown on his head as victor. The Odeon of the same city, with its Late Roman seat reservations, might even have been the setting for such competitions. At Antioch we hear of a wrestling arena, which was progressively expanded by members of Libanius' family. Elsewhere, it can be noted that a significant number of bouleuteria-odea were converted into sites for water spectacles (from the 5th c. onwards it seems), with their orchestras being modified to allow flooding. The best documented example is at Aphrodisias, where the bouleuterion has a building inscription relating to its conversion into an odeon and *topos* inscriptions identifying the seating arrangements of the audience. It should also be remembered that public declamations by distinguished rhetors might constitute a major cultural event: we find Himerius declaming before the governor in the praetorium at Athens (Himerius *Or.* 38) and Libanius doing the same in the bouleuterion at Nicomedia (Lib. *Or.* 1.65–74).

In the bibliographic listing below, entertainment types are divided according to their most appropriate setting: thus athletic games with stadia; plays in theatres, animal and gladiator fights in amphitheatres and chariot races in circuses. However, it should be remembered however that circuses at least had the capacity to host all of these entertainments, even if the reverse was not true. Visual evidence where it exists contains similar ambiguity: a number of diptychs appear to show beast fights in an amphitheatre setting; this is likely, but they could however be a representation of a *sphendone*, the curved end of the circus, which might, with a few wooden screens on the track, have

permitted such spectacles (as in the case of the 4th consular games of Honorius). Spatial function was not quite as strongly divided as architectural typology suggests.

1. Mass Entertainment in Late Antiquity

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Literary sources, major: *Cod. Theod. Cod. Theod.* 6.4.1–34; 15.5 (*de Spectaculis*), 15.6 (*de Maiuma*), 15.7 (*de Scaenicis*). Claudian *De sexto consulatu Honorii Augusti* 562–79. Claudian *De consulatu Manlii Theodori*, lines 282–340. Symacchus *Epistles* with Jones A. H. M. (1964) *The Later Roman Empire A.D. 284–602. A Social and Administrative Survey* (Oxford 1964) 560–61 providing references in 1231 n.87. *Cod. Just.* 11.43 (concerning gladiators), 11.44 (concerning the chase of wild beasts), 11.45 (concerning the maiuma). Theocharidis G. J. (1940). *Beiträge zur Geschichte des byzantinischen Profantheaters im IV. und V. Jahrhundert* (Thessalonica 1940). Futrell A. R. (2006) *The Roman Games: a Sourcebook* (Oxford 2006). Augenti D. (2001) *Spettacoli del Colosseo nelle cronache degli antichi* (Roma 2001).

Rhetoric against games: Many patristic authors e.g. Salvian *De Gubernatione Dei* book 6 ed. Lagarrigue G. (Paris 1975) (SC 220). For references and discussion see Saradi (2006) above 310–15. See also Jones A. H. M. (1940) *The Greek City from Alexander to Justinian* (Oxford 1940) 254–55. Lampe G. W. H. (1961) "Theatron", in *A Patristic Greek Lexicon* (Oxford 1961). Ville G. (1960) "Les jeux de gladiateurs dans l'Empire chrétien", *MEFRA* 72 (1960) 273–335, esp. 290–95. Jürgens H. (1972) *Pompa diaboli. Die lateinischen Kirschenväter und das antike Theater* (Tübinger Beiträge zur Altertumswissenschaft 46) (Stuttgart

1972). Weismann W. (1972) *Kirche und Schauspiele. Die Schauspiele im Urteil der lateinischen Kirchenväter unter besonderer Berücksichtigung von Augustin* (Würzburg 1972). Schnusenberg C. C. (1988) *The Relationship Between the Church and the Theatre, Exemplified by Selected Writings of the Church Fathers and by Liturgical Texts until Amalarius of Metz, 775–852 A.D.* (Lanham, 1988). Cuscito G. (1994) "Giochi e spettacoli nel pensiero dei Padri della Chiesa", *Antichita' alto-adriatiche* 41 (1994) 107–28. Van Slyke D. G. (2005) "The Devil and his pomps in fifth century Carthage: renouncing spectacula with spectacula imagery", *DOP* 59 (2005) 53–72. References in Augustine listed and discussed by Lepelley C. (1979) *Les cités de l'Afrique romaine au Bas-Empire. 1: La permanence d'une civilisation municipale* (Études Augustiniennes Série Antiquité 80) (Paris 1979) 376–85. Honigman S. (2000) "Un regard sur le théâtre romain: les sources rabbiniques", in *Romanité et cité chrétienne: permanences et mutations, intégration et exclusion du Ier au VIe siècle. Mélanges en l'honneur d'Yvette Duval* (Paris 2000) 171–95. Pasquato O. (1979) *Gli spettacoli in S. Giovanni Crisostomo. Paganesimo e Cristianesimo ad Antiochia e Constantinopoli nel IV secolo* (Roma 1979). Moss C. (1935) "Jacob of Serugh's homilies on the spectacles of the theatre", *Le Muséon* 48 (1935) 87–112. See also Theocharidis (1940) above.

2. Stadia (athletic games)

Syntheses, Classical Greek to Early Imperial: *Architecture*: Lemoine B. (1998) *Les stades en gloire* (Paris 1998). Musée archéologique Henri-Prades (1994) *Le stade romain et ses spectacles, catalogue de l'exposition du musée archéologique de Lattes du 4 juin au 20 octobre 1994* (Lattes 1994). Romano D. G. (1993) *Athletics and Mathematics in Archaic Corinth: The Origins of the Greek 'Stadion'* (Philadelphia 1993). Verspohl F.-J. (1976) *Stadien: die Arena im Gesellscaften Spannungsfeld von der Antike bis zur Gegenwart* (Ph.D. diss., Justus-Liebig-Universität Giessen 1976). *The games*: Scanlon T. F. (1984) *Greek and Roman Athletics* (Chicago 1984). Meuli K. (1968) *Die griechische Agon* (Cologne 1968). Golden M. (1998) *Sport and Society in Ancient Greece* (Cambridge 1998). Decker W. and Thuillier J. (2004) *Le sport dans l' antiquité: Égypte, Grèce et Rome* (Paris 2004). Buchanan D. (1972) *Greek Athletics* (London 1972). Miller S. (1991) *Arete: Greek Sports from Ancient Sources* (Berkeley 1991). Raschke W. J. (1988) *The Archaeology of the Olympics. The Olympics and Other Festivals in Antiquity* (Madison 1988).

Syntheses, Late Antiquity: For the Olympic games at Antioch and elsewhere, and athletics in general for the 4th c. see Liebeschuetz J. H. W. G. (1972) *Antioch. City and Imperial Administration in the Later Roman Empire* (Oxford 1972) 136–44. Downey G. (1939) "The Olympic Games of Antioch in the fourth century A.D.", *TAPA* 70 (1939) 428–38. Saradi H. G. (2006) *The Byzantine City in the Sixth Century: Literary Images and Historical Reality* (Athens 2006) 306–309.

Architecture: *Stadium at Antioch, on Island*: new stadium of mid-5th c. date: Stillwell R. (1938) ed. *Antioch-on-the Orontes I. The Excavations 1933–1936* (Princeton 1938) 32–33. This was possibly a practice arena for horses—its seems not to have been used for show, due to a lack of seats and the orientation of the arena which apparently would have caused one bank of spectators to have had the sun in their eyes. It was identified with a horse exercising track 'piste cavalière' shown on the Yakto Mosaic by Poccardi G. (1994) "Antioche

de Syrie. Pour un nouveau plan urbain de l'île de l'Oronte (Ville neuve) du IIIe au Ve siècle", *MEFRA* 106 (1994) 1013–14. *Stadium at Antioch, Daphne*: Diocletian built a 'stadion' at Daphne says Malalas 307.5ff. It has been suggested this was a renovation of an earlier structure: Downey G. (1937) "Malalas on the history of Antioch under Severus and Caracalla", *TAPA* 68 (1937) 141–52. The Yakto Megalopsychia mosaic has a stadium/ hippodrome structure at Daphne labeled "To Olympiakon", which must correspond with the stadium here mentioned by Malalas. *Olympia*: restorations in spolia visible (site visit L.L. April 2003).

Literary sources: references to the Olympic games at Antioch and Apamea (including wrestling, boxing and running, as well as poetry and rhetoric, and at Antioch a banquet) in Liebeschuetz (1972) 138–39. *Expositio Totius Mundi et Gentium* 32 (pancreatic fighters, wrestlers and athletes in Gaza, Ascalon and Castabala). Claudian *De consulatu Manlii Theodori*, lines 282–340 (includes wrestling, athletics and acrobatics in A.D. 399). Procop. *Pers.* 1.13.30 (trainer of a wrestling school at Cple.) Athletics also mentioned as part of circus games in 6th c. Oxyrynchus: *P. Oxy.* 2707.

Depictions: Mosaic of first 3rd of the 4th c. from Batten Zamour (Archaeological Museum of Gafsa) depicts spectacles with athletic contests (racing, boxing and wrestling): see Blanchard-Lemée M., Ennaïfer M., Slim H. and Slim L. (1995) *Mosaics of Roman Africa: Floor Mosaics from Tunisia*, transl. K .D. Whitehead (NewYork 1995) 190–96. Mosaic in Constantinian villa, at Daphne, Antioch: Levi D. (1971) *Antioch Mosaic Pavements* vol. 2 (Rome 1971). Diptych of Anastasius in Leningrad: Volbach W. F. (1976) *Elfenbeinarbeiten der Spätantike und des frühen Mittelalters* (Mainz am Rhein 1976; 3rd ed.) no. 19.

3. Amphitheatres (gladiatorial games and venationes)

Syntheses: *Architecture*: Gros P. (1996) *L'architecture romaine du début du IIIe siècle av. J.-C. à la fin du Haut-Empire. Volume 1: les monuments publics* (Paris 1996) 317–45. Golvin J.-C. (1988) *L'amphithéâtre romain: essai sur la théorisation de sa forme et de ses fonctions*, 2 vols. (Paris 1988). Dodge H. (1999) "Amusing the masses: buildings for entertainment and leisure in the Roman World", in *Life, Death and Entertainment in the Roman Empire*, edd. D. S. Potter and D. J. Mattingly (Ann Arbor 1999) 205–55. Bomgardner D. (2000) *The Story of the Roman Amphitheatre* (London 2000). Welch K. (2001) "Recent work on amphitheatre architecture and arena spectacles", *JRA* 14 (2001) 492–98. Welch K. (2004) *The Roman Amphitheatre: from its Origins to the Colosseum* (Cambridge and New York 2004). *The Games*: Roland A. (1970) *Cruauté et civilization: les jeux romains* (Paris 1970). Kyle D. (1998) *Spectacles of Death* (London 1998). Golvin J.-C. and Landes C. (1990) *Amphithéâtres et gladiateurs* (Paris 1990). Domergue C., Landes C. and Pailler J. M. (1990) edd. *Spectacula 1: Gladiateurs et amphithéâtres, actes du colloque tenu à Toulouse et à Lattes les 26, 27, 28 et 29 mai 1987* (Paris 1990). Wiedemann T. (1992) *Emperors and Gladiators* (London 1992). Plass P. (1995) *The Game of Death in Ancient Rome: Arena Sport and Political Suicide* (Wisconsin 1995). Futrell A. (1997) *Blood in the Arena: The Spectacle of Roman Power* (Austin 1997). Köhne E. and Ewigleben C. (2000) *Gladiators and Caesars: The Power of Spectacle in Ancient Rome (*London 2000).Augenti D. (2001) *Spettacoli del Colosseo nelle cronache degli*

antichi (Roma 2001). Potter D. S. (2001) "Viewing Greco-Roman spectacles", *JRA* 14 (2001) 485–91. Potter D. S. (2001) "Death as spectacle, and subsequent disposal", *JRA* 14 (2001) 475–84.

Syntheses, Late Antiquity: Claude D. (1969) *Die byzantinische Stadt im 6. Jahrhundert* (Byzantinisches Archiv 13) (Munich 1969) 74. Ward-Perkins B. (1984) *From Classical Antiquity to the Middle Ages* (Oxford 1984) 92–118. Saradi H. G. (2006) *The Byzantine City in the Sixth Century: Literary Images and Historical Reality* (Athens 2006) 305–306. Wiedemann T. (1995) "Das Ende der römischen Gladiatorenspiele", *Nikephoros* 8 (1995) 145–59. Roueché C. (1992) "Les spectacles dans la cité romaine et post romaine", *Cahiers Glotz* 3 (1992) 157–61. Lim R. (1999) "People as power: games, munificence, and contested topography", in *The Transformations of Urbs Roma in Late Antiquity*, ed. W. Harris (JRA Suppl. Ser. 33) (Portsmouth, R. I. 1999) 265–81. Bombgardner (2000) above 197–227.

Architecture, new building and repairs: *Sitifis*: new cavea (i.e. whole building likely new) probably under Maximian *AE* (1928) 39 = *BCTH* 1928 June xi, with also *CIL* 8.8482 (work under Julian). Rome, Colosseum Late Roman repairs: *CIL* 6.1716a, b, c = *ILS* 5635 (A.D. 484 according to Chastagnol (1966 below) 44). Repairs / or building anew also recorded at Pavia: Theodoric "built" an amphitheatre at Pavia: *Anon. Vales.*, c. 60 and c. 71, but Ward-Perkins (1984) 115 thinks it was a repair due to an inscription of the third year of Athalaric which talks of the repair of the "seats of the entertainment building" which probably refers to this enterprise *CIL* 5.6148 = *ILS* 829.

Architecture, stadium to amphitheatre conversions: *Athens*: Welch K. (1998) "Greek stadia and Roman spectacles: Asia, Athens and the tomb of Herodes Atticus", *JRA* 11 (1998) 117–45. Aphrodisias: Welch K. (1998) "The stadium at Aphrodisias", *AJA* 102 (1998) 565–69. *Ephesus*: Karwiese S. (1998) "Ephesos 1997: Stadion", *ÖJh* 67 (1998) 23.

Architecture, hippodrome to amphitheatre conversion: *Caesarea Palestinae*: Porath Y. (1995) "Herod's 'amphitheatre' at Caesarea: a multi-purpose entertainment building", in *The Roman and Byzantine Near East: Some Recent Archaeological Research*, ed. J. H. Humphrey (JRA Suppl. Ser. 14) (Ann Arbor 1995) 22–23. See also Porath Y. (1998) *Excavations and Surveys in Israel* 17 (1998) 38–49. Humphrey J. H. (1996) "'Amphitheatrical' Hippo-Stadia", in *Caesarea Maritima. A Retrospective After Two Millennia*, edd. A. Raban and K. G. Holum (Leiden 1996) 121–29. *Scythopolis*: Tsafrir Y. and Foerster G. (1997) "Urbanism at Scythopolis-Bet Shean in the fourth to seventh centuries", *DOP* 51 (1997) 104–105. Neapolis: Magen Y. (1993) "Shechem-Neapolis", *NEAEHL* 4 (1993) 1357–58. *Gerasa*: Ostrasz A. (1989) "Hippodrome of Gerasa: a report on excavation and research 1982–1987", *Syria* 66 (1989) 73–74. See also Müller E. B. (1938) "The hippodrome", in *Gerasa. City of the Decapolis*, ed. C. H. Kraeling (New Haven 1938) 98–99.

Architecture, theatre to amphitheatre conversions: (quoting from Sear (2006) with page reference) *Stobi*: 419—"Orchestra remodelled after earthquake (end 3rd c. A.D.)", "Arena: later, thick masonry wall built on top of podium (overall H. 3.60m); paradoi sealed off with heavy gates; long curtain wall built in front of scene building with three doorways; 2 further refuges built at sides of podium". *Philippi*: 423—"Arena D 27.20m; proscaenium demolished

to create an almost circular arena (3rd c. A.D.). A marble barrier (H. 0.90m) set up on top of podium; behind are mast-slots for a protective barier (total H. 3.70m)". *Antioch in Pisidia*: 363 [but fuller notes in Mitchell and Waelkens (1998) below and Drew-Bear (1999) below, detailed in theatre section. Excavations are on-going]. *Myra*: 370–71—"Arena later 3rd c. A.D.; Kolymbethra ca. A.D. 300", "Kolymbethra: orchestra later adapted as kolymbethra; doors into hyposcaenium sealed". *Side*: 377—"Arena: at late period, massive wall (W. 2m) built around orchestra, enclosing lowest 4 rows of seats, ?to create arena for *venationes* or *kolymbethra*". *Telmessus*: 378—"Arena: in late empire rough wall (max. pres. H. 2.75m) built around orchestra; in middle of it 2 doors led into cavea". *Xanthus*: 380—"Arena: surrounded by podium wall (H. 3.30–3.40m) containing re-used seat blocks, which suggests lowest rows of seats removed to create arena in later phase; 3 doorways in podium wall; behind lateral staircases leading up to seating", "3 central doors of scaenae frons walled up in Late Antiquity, ?part of scheme to turn orchestra in arena". *Perge*: 372–73—"Arena ca. A.D. 250 or later". *Side*: for evidence of late antique rebuilding with crosses over vaults and inscriptions, see Mansel A. M. (1963–64) "Restaurationen und Umänderungen des Theaters von Side in byzantinische Zeit", in *Actes du XIIe congrès international d'études byzantines, Ochride 10–16 septembre, 1961* (Belgrade 1963–64) Also *Patara* not yet published.

Epigraphy: with seating places: *Rome*: Chastagnol A. (1966) *Le Sénat romain sous le règne d'Odoacre: recherches sur l'épigraphie du Colisée au V^e siècle* (Bonn 1966) esp. 24–25 and others inscriptions; *Aphrodisias*: Roueché C. (1993) *Performers and Partisans at Aphrodisias* (JRS Mon. 6) (London 1993) no. 47. See the multivolume *Epigrafia Anfiteatrale dell'Occidente Romano* (Rome 1988–present) and Fora M. (1996) *I munera gladiatoria in Italia: considerazioni sulla loro documentazione epigrafica* (Naples 1996).

Literary evidence: August. *Conf.* 6.8 (on the atmosphere of the games); Claudian *De consulatu Manlii Theodori* lines 282–340, Prudentius *Contra Symmachum* 1.379–85 and 2.1090–1132 (on vestal virgins in amphitheatre etc.), Cassiod. *Var.* 5.42, *Chronica* a. 519 (games of consul Eutharic). *SHA* 19.1–8 (on games of emperor Probus). Jürgens H. (1972) *Pompa diaboli, die lateinischen Kirchenväter und das antike Theater* (Tubinger Beitrage zum Altertumswissenschaft 46) (Tübingen 1972). Description of amphitheatre: Malingrey A.-M. (1972) *Jean Chrysostome: sur la vaine gloire et l'éducation des enfants* (SC 188) (Paris 1972) 74–85.

Pictoral evidence: *Consular diptychs*: of Areobindus, Anastasius and others see Volbach W. F. (1976) Elfenbeinarbeiten der Spätantike und des frühen Mittelalters (Mainz am Rhein 1976; 3rd ed.) nos. 8, 21, 36, 58, 59, 60, Delbrueck R. (1929) *Die Consulardiptychen und verwandte Denkmäler* (Studien zur spätantiken Kunstgeschichte 2) (Berlin and Leipzig 1929). *Mosaics*: See in general Dunbabin K. M. D. (1999) *Mosaics of the Greek and Roman World* (Cambridge 1999) and Dunbabin K. M. D. (1978) *The Mosaics of Roman North Africa: Studies in Iconography and Patronage* (Oxford 1978). For specific examples: Amphitheatre animals within a geometric design (Rome) (4th c.), Gladiator mosaic (Villa Borghese, early 4th c.). Collecting of animals for the amphitheatre (Piazza Armerina) (4th c.). For these mosaics see Blanchard-Lemée (1995) above 200–17, 291. Beschaouch A. (1966) "La mosaïque de chasse à l'amphithéâtre

découverte à Smirat en Tunisie", *CRAI* (1966) 134–57. Blake M. E. (1940) "Mosaics of the late empire in Rome and vicinity", *MAAR* 17 (1940) 81–130 (on Villa Borghese mosaics). Brown S. (1992) "Death as decoration: scenes from the arena in Roman domestic mosaics", in *Pornography and Representation in Greece and Rome*, ed. A. Richlin (Oxford 1992) 180–211. Other: Hope C. A. and Whitehouse H. V. (2003) "The gladiator jug from Ismant el-Kharab", in *The Oasis Papers III: Proceedings of the Third International Conference of the Dakhleh Oasis Project*, edd. G. E. Bowen and C. A. Hope (Melbourne 2003) 291–310 (3rd c. or 1st half of 4th c. A.D.).

4. Theatres

Syntheses: *Roman theatres*: the key work is Sear F. (2006) *Roman Theatres: An Architectural Study* (Oxford 2006). See also Bieber M. (1961) *The History of the Greek and Roman Theater* (Princeton 1961, 2nd ed.). Frézouls E. (1982) "Aspects de l'histoire architecturale du théâtre romain", *ANRW* II.12.1 (Berlin 1982) 343–441. Beacham R. C. (1991) *The Roman Theatre and its Audience* (London 1991). Landes C. (1992) ed. *Spectacula II. Le théâtre antique et ses spectacles (Actes du colloque tenu au Musée archéologique Henri Prades de Lattes les 27, 28, 29 et 30 avril 1989)* (Lattes 1992). Segal A. (1994) ed. *Theatres in Roman Palestine and Provincia Arabia* (Leiden 1994). Csapo E. and Slater W. (1995) *The Context of Ancient Drama* (Ann Arbor, MI 1995). Beacham R. C. (1992). Gros P. (1996) *L'architecture romaine du début du III^e siècle av. J.-C. à la fin du Haut-Empire. Volume 1: les monuments publics* (Paris 1996) 272–307.Slater W. J. (1996) *Roman Theater and Society* (Ann Arbor 1996). *The Roman Theatre and Its Audience* (Cambridge, Mass. 1992). Ciancio Rossetto P. and Pisani Sartorio G. (1994–96) edd. *Teatri greci e romani: alle origini del linguaggio rappresentato*, 3 vols. (Rome 1994–96). Wiseman T. P. (1998) *Roman Drama and Roman History* (Exeter 1998). Bergmann B. and Kondoleon C. (1999) edd. *The Art of Ancient Spectacle* (Washington, D. C. 1999).

Syntheses, Late Antiquity: Saradi H. G. (2006) *The Byzantine City in the Sixth Century: Literary Images and Historical Reality* (Athens 2006) 310–24. Vogt A. (1931) "Le théâtre à Byzance et dans l'empire du IVe au XIIIe siècle", *Revue des Questions Historiques* 115 (1931) 257–96. Vogt A. (1931) "Études sur le théâtre byzantin II", *Byzantion* 6 (1931) 623–40. Claude D. (1969) *Die byzantinische Stadt im 6. Jahrhundert* (Byzantinisches Archiv 13) (Munich 1969) 74. Lepelley C. (1989) "Trois documents méconnus sur l'histoire sociale et religieuse de l'Afrique romaine tardive retrouvés parmi les spuria de Sulpice Sévère", *AntAfr* 25 (1989) 271–77. Blänsdorf J. (1990) "Der spätantike Staat und die Schauspiele im Codex Theodosianus", in *Theater und Gesellschaft im Imperium Romanum*, ed. J. Blänsdorf (Mainzer Forschungen zu Drama und Theater 4) (Tübingen 1990) 261–73. Wiedemann (1995) above. Barnes T. D. (1996) "Christians and the theater", in *Roman Theater and Society*, edd. W. J. Slater (E. Togo Salmon Papers 1) (Ann Arbor 1996) 161–80. Vivilakes I. (1996) *Ἡ Θεατρική Ὁρολογία στούς Πατέρες τῆς Ἐκκλησίας· Συμβολή στή Μελέτη τῆς Σχεσέως Ἐκκλησίας καί Θεάτρου* (*Theatrical Terminology among the Church Fathers. A Contribution to the Study of the Connection between the Church and the Theatre*) (Ph.D. diss., University of Athens 1996). Entry on "Actors and acting", in *Late Antiquity: A Guide to the Postclassical World*, edd. G. W. Bowersock, P. Brown and O. Grabat (Cambridge,

Mass. and London 2000) 276–77. Malineau V. (2006) "Le théâtres dans les cités de l'Italie tardo-antique", in *Les cités de l'Italie tardo-antique (IV^e–IV^e siècle): institutions, économie, société, culture et religion*, edd. M. Ghilardi, C. Goddard and P. Porena (Rome 2006).

Specific types of entertainment: Greatrex G. B. and Watt J. W. (1999) "One, two or three feasts? The Brytae, the Maiouma and the May Festival at Edessa", *OC* 83 (1999) 1–21. Traversari G. (1960) *Gli Specttacoli in acqua nel teatro tardo-antico* (Rome 1960). Lim R. (2002) "The Roman pantomime riot of A.D. 509", in '*Humana Sapit': études d'Antiquité tardive offertes à Lellia Cracco Ruggini*, edd. J.-M. Carrié and R. Lizzi Testa (Bibliothèque de l'Antiquité tardive 3) (Turnhout 2002) 35–42. Slater W. J. (1994) "Pantomime riots", *CA* 13 (1994) 120–44. Longosz S. (1993) "L'antico mimo anticristiano", in *Studia Patristica* 25 (1993) 164–68. Malineau V. (2005) "L'apport de l'Apologie des mimes de Choricius de Gaza à la connaissance du théâtre du VIe siècle", in *Gaza dans l'Antiquité Tardive. Archéologie, rhétorique, histoire. Actes du Colloque International de Poitiers (6–7 mai 2004)* ed. C. Saliou (Salerno 2005) 149–69. Malineau V. (forthcoming) "La représentation des religions dans le théâtre de l'Antiquité tardive", in *Jeux et spectacles dans l'Antiquité romaine tardive*, ed. E. Soler (forthcoming) Panayotakis C. (1997) "Baptism and crucifixion on the mimic stage", *Mnemosyne* IV.50 (1997) 302–19. Lim R. (forthcoming) "Converting the unchristianizable: the baptism of stage performers in Late Antiquity", in *Conversion in Late Antiquity and the Middle Ages*, edd. A. Grafton and K. Mills (forthcoming). Elm S. (2003) "Marking the self in Late Antiquity: inscriptions, baptism and the conversion of mimes", in *Stigmata*, edd. B. Vinken and B. Menken (Weimar 2003) 47–68. Link J. (1904) *Die Geschichte der Schauspieler, nach einem syrischen Manuscript der königlichen Bibliothek in Berlin* (Ph.D. diss., Universität Bern 1904). Van Den Vorst Ch. (1910) "Une passion inédite de saint Porphyre le mime", *AB* 29 (1910) 258–75. Cavalin S. (1945) "Saint Genès le notaire", *Eranos* 43 (1945) 150–75. Weismann W. (1975) "Gelasinos von Heliopolis. Ein Schauspieler-Märtyrer", *AnalBoll* 93 (1975) 39–66. Weismann W. (1977) "Die Passio Genesii mimi (BHL 3320)", *Mittellateinisches Jahrbuch* 12 (1977) 22–24. Baumeister T. (1980) "Der Märtyrer Philemon", in *Pietas. Festschrift für Bernhard Kötting*, edd. E. Dassmann and K. S. Frank (Munster 1980) 272.

Performers and spectators: Vespignani G. (1999) "Considerazioni sulla figura della donna di spettacolo a Bizanzio nella tarda Antichità", *Bizantinistica* 1 (1999) 1–12. Webb R. (2002) "Female entertainers in Late Antiquity", in *Greek and Roman Actors: Aspects of an Ancient Profession*, edd. P. Easterling and E. Hall (Cambridge 2002) 282–303. Lim R. (1999) "In the 'Temple of Laughter': visual and literary representations of spectators at Roman games", in *The Art of Ancient Spectacle*, edd. B. B. Bergmann and C. Kondoleon (Washington 1999) 343–65. Puchner W. (2002) "Actors in the Byzantine theatre: evidence and problems", in Easterling and Hall (2002) above 304–26. Roueché C. (2002) "Images of performance: new evidence from Ephesus", in Easterling and Hall (2002) above 254–81. Soler E. (2004) "Les acteurs et les excès d'Antioche au IV^e siècle apr. J.-C.", *Table ronde sur Le statut de l'acteur dans l'Antiquité grecque et romaine, Université de Tours, 3–4 mai 2002* (Tours 2004) 251–72.

Architecture, repairs known from epigraphy (excluding amphitheatre conversions): Ostia (*CIL* 14.129), Capua (*CIL* 10.3821), Syracuse (*CIL* 10.7124), Athens (*IGII2* 5021), Merida (Chastagnol A. (1976) "Les inscriptions constantiniennes du cirque de Mérida", *MÉFRA* 88 (1976) 259–76), Ammaedara (*CIL* 8.11532 and *ILT* 461), possibly Bulla Regia (*CIL* 8.25520), Madauros (*ILAlg* 1.2107), Sufetula (*CIL* 8.11334–5), Lepcis (*IRT* 470), Sparta (*SEG* 11.464), Ephesus (Robert L. (1948) *Hellenica* 4 (1948) 87A and B), Antioch in Pisidia (Christol M. and Drew-Bear T. (1999) "Antioche de Pisidie capitale provinciale et l'œuvre de M. Valerius Diogenes", *AnTard* 7 (1999) 38–71). All inscriptions are late 3rd or 4th, except Syracuse and perhaps Athens.

Architecture, repairs known from literary sources: *Rome*: repaired under Diocletian and Maximian (*Chronicle of A.D. 354* 148), Honorius (*CIL* 6.1191 = *ILS* 793, A.D. 395/402) and Theodoric (Cass. *Var.* 4.51). *Gaza*: Choricius praises the governor of Palestina Prima Stephanus, for restoring Gaza's summer theatre: *Or.* 3.55. *Antioch*: restoration of theatre by Justinian after destruction of city by Persians: Procop. *Aed.* 2.10.22. Possible restoration (at least financial support of theatre) in 530: Malalas 18.62–67 *Sycae* (suburb of Cple): restoration of theatre in A.D. 528: Malalas 18.12.

Architecture, repairs known from archaeology: Ferentium, Saepinum, Dion, Athens, Sicyon, Argos, Lemnos (theatre at Hephaestia), Miletus, Troy, Antioch in Pisidia, Termessos, Aphrodisias, Side, Salamis, Daphne outside Antioch, Ptolemais, Alexandria. For references see catalogue entries in Sear (2006). For Scythopolis, not included in Sear's catalogue, see Mazor G. (1987–88), "The Bet Shean project: The city center of ancient Bet Shean," *Excavations and Surveys in Israel* 6 (1987–88) 20–22. For Nicaea's theatre repairs to cavea in spolia seen by Luke Lavan in 2001. For Thessalonica See below under Odea. For Antioch in Pisidia see Christol and Drew-Bear (1999) above plus S. Mitchell and M. Waelkens (1998) *Pisidian Antioch. The Site and its Monuments* (London 1998). *Conversion into water spectacles dated to late antique period*: Ostia, Syracuse, Athens, Corinth, Argos, Troy theatre C, Ephesus, Myra, Side?, Salamis (3rd c.), Casearea Palestinae. For references see catalogue entries in Sear (2006). At Scythopolis new drainage systems under the stage may relate to water spectacles: Mazor G. (1987–88) "The city center of ancient Bet Shean", in "The Bet Shean project", *Excavations and Surveys in Israel* 6 (1987–88) 20. See also Traversari (1960). *Seats of Honour/Tribunals*: late platforms, generally made of spolia, inserted in centre of cavea, discussed in Roueché C. M. (1991) "Inscriptions and the later history of the theatre", in *Aphrodisias Papers 2: The Theatre, a Sculptor's Workshop, Philosophers, and Coin-Types*, edd. R. R. R. Smith and K. T. Erim (JRA Suppl. Ser. 2) (Porthsmouth, R. I. 1991) 99–108. The following have been visited by L. Lavan in 2001 and 2003: Argos, Athens? Stratonicea, Aphrodisias, Priene (v. probable), Nysa, Miletus, Olba [the last not recorded prior to my visit]. Roueché also lists seats at Tralleis, Termessos and Side which I was unable to confirm, but some of these may have been removed in restoration work. A further such seat/tribunal has been recorded in the Odeon of Ptolemais: Goodchild R. G. and Kraeling C. H. (1962) "The 'Odeon' and related structures", in *Ptolemais: City of the Libyan Pentapolis*, ed. C. H. Kraeling (1962) (Chicago 1962) 94–95.

Literary evidence, selected: Well collected in Saradi (2006) 310–19. *Mixed spectacles*: Claudian *De consulatu Manlii Theodori*, lines 282–340 (A.D. 399), *Pantomime*: Lib. *Or.* 64. *Mime*: Jacob of Serug *Homilies on the Spectacles of the Theatre*, Choricius of Gaza *Synegoria mimon* (On the defence of the mimes). Homilies of Severus of Antioch as listed in Saradi. *Maiuma*: Joh. Chry. *Hom. in Matt.* 7.6. *Dancers*: Procop. *Anecdota* 9.2–9.26. Leont. N. *v. Sym.* 4. *Experience of rulers in theatre*: Governors: Liebeschuetz (1972) above 212–18, 278–80 (discussion on the impact and nature of the claque). Emperors: (in entertainment buildings) see Henck N. (2007) "Constantius II and the cities", in *Wolf Liebeschuetz Reflected: Essays Presented by Colleagues, Friends, and Pupils*, edd. J. Drinkwater and B. Salway (BICS Suppl. 91) (London 2007) 147–56. Senators: Cassiod. *Var.* 1.27. *Official uses*: Public Announcements: Joh. Chry. *Hom in Matth.* 1.17, 19.12; Socrates *HE* 7.13. Assemblies: Lib. *Or.* 27.32; Sozom. *Hist. eccl.* 5.9 (Gaza); *P. Oxy.* 1.41 (Oxyrhynchus, minutes of assembly meeting). *Constantinople in general*: Janin R. (1964) *Constantinople byzantine, développement urbain et répertoire topographique* (Paris 1964, 2nd ed.) 177–91.

Epigraphy (seating places): *CIL* 8.24659, seats of *honorati* at Carthage; Sartre M. (1982) *Inscriptions de Bostra* (IGLS 13.1) (Paris 1982) 13.9156–68. Roueché C. (1995) "Aurarii in the Auditoria", *ZPE* 105 (1995) 37–50. See also section below on auditoria.

Depictions: Diptychs of Anastasius show troupes of actors, with masks: Volbach W. F. (1976) *Elfenbeinarbeiten der Spätantike und des frühen Mittelalters* (Mainz am Rhein 1976; 3rd ed.) no. 16 and 19. Bikini-clad girls in mosaics of Piazza Armerina may have been engaged in water spectacles: Carandini A., Ricci A. and de Vos M. (1982) *Filosofiana. La villa di Piazza Armerina* (Palermo 1982). Water spectacles are known from mosaics of Antioch: Levi D. (1974) *Antioch Mosaic Pavements* (Princeton 1974) II, pl.79 as pointed out by Segal (1985–89) below 159, n.43. See also Roueché (2002 above).

Functional artefact studies: Malineau V. (2003) "Les éléments du costume de théâtre dans l'Antiquité tardive", in *Costume et société dans l'Antiquité et le haut Moyen Age*, edd. F. Chausson and H. Inglebert (Paris 2003) 153–68.

5. Odea

Syntheses: Meinel R. (1980) *Das Odeion: Untersuchung an uberdachten antiken Theatergebauden* (Europaische Hochschulschriften. Reihe XXVIII, Kunstgeschichte, Bd. 11) (Frankfurt am Main 1980). See also Balty J. C. (1991) *Curia Ordinis: recherches d'architecture et urbanisme antiques sur les curies provinciales du monde Romain* (Académie royale de Belgique. Mémoires de la classe des beaux-arts. Collection in 4°: 2e série 15, 2) (Brussels 1991) 431–578. Traversari G. (1960) *Gli specttacoli in acqua nel teatro tardo-antico* (Rome 1960). Gros P. (1996) *L'architecture romaine du début du IIIe siècle av. J.-C. à la fin du Haut-Empire. Volume 1: les monuments publics* (Paris 1996) 308–16. Claude D. (1969) *Die byzantinische Stadt im 6. Jahrhundert* (Byzantinisches Archiv 13) (Munich 1969) 75.

Architecture, repairs: *Thessalonica*: bouleuterion-odeon expanded (late 3rd c.) and then transformed into a real theatre (first half of 4th c.): Kalavria V. and Boli A. (2001) "The stratification of the east wing", in *Αρκαια αγορα θεσσαλονικης 1 Εποπτεια επιμελεια εκδοσης*, ed. P. Adam Veleni (Thessal-

onica 2001) 39–64, summary 326–27. Velenis G. and Adam Veleni P. (1989) "Ρωμαϊκό θέατρο στη Θεσσαλονίκη", *Archaeological Work in Macedonia and Thrace* 3 (1989) 241–57. *Ptolemais*: repairs to vaults: see Kraeling (above).

Architecture, conversion of bouleuteria-odea into arenas for water spectacles: Traversari G. (1960) *Gli Specttacoli in acqua nel teatro tardo-antico* (Rome 1960). Segal A. (1985–89) "Theatres of ancient Palestine during the Roman-Byzantine period (an historical-archaeological survey)", in *Scripta Classica Israelica* 8–9 (1985–89) 158–59. *Examples*: Sicyon, Aphrodisias, Ptolemais Odeon, for which see Kraeling, Traversari and Sear above, plus Roueché below. For Aizanoi see recent reports in *AA*.

Literary sources: Aug. *Conf.* 4.3 (public poetry competition won by Augustine, crowned by proconsul). Lib. *Or.* 1.37–42 (at Cple), 1.61. 1.70–72 (at Nicomedia).

Epigraphy (seating places): Aphrodisias: Roueché C. (1993) *Performers and Partisans at Aphrodisias* (JRS Mon. 6) (London 1993) no. 47. Alexandria: Makowiecka E. (1968) "The numbering of the seating places at the Roman theatre of Kom el Dikka", *Acta Conventus XI Eirene* (1968) 479–83. Borkowski Z. (1981) *Alexandrie II: inscriptions des factions à Alexandrie* (Warsaw 1981).

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Architecture, repair: *Antioch*: extensively repaired in the 4th c. A.D.: Elderkin G. W. (1934) ed. *Antioch on the Orontes* I (Princeton 1934) 34–41.

Literary evidence, selected: Amm. Marc. 28.4.29–33, Cassiod. *Var.* 3.51, *Procop. *Vand*. 2.9, Anonymous *Strategikon* 3.101–107. Cameron A. (1973) *Porphyrius the Charioteer* (Oxford 1973). Cameron A. (1976) *Circus Factions: Blues and Greens at Rome and Byzantium* (Oxford 1976) 318–33 Appendix C: a circus dialogue. Malalas 13.8 (ceremony with statue of Constantine in a chariot). Hippodrome programme, 6th c.: *P. Oxy* 2707.

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Pictoral evidence: *Diptychs*: consular diptych of Lampadi (5th c.), Basilius (A.D. 480), possibly on diptych of Anastasius (A.D. 517). Delbrueck R. (1929) *Die Konsulardyptichen und verwandte Denkmäler* (Berlin and Leipzig 1929); Leningrad: Volbach W. F. (1976) *Elfenbeinarbeiten der Spätantike und des frühen Mittelalters* (Mainz am Rhein 1976; 3rd ed.) no. 19. *Mosaics, selected*: hippodrome, Gafsa (Bardo Museum Carthage) (6th c.); race horse, Sidi Abdallah (Bardo Museum); Eros the victorious charioteer, Dougga (Bardo Museum) (Late 4th c.), for these African mosaics, see Blanchard-Lemée (1995) above. Consul and charioteers in Basilica of Junnius Bassus, Rome (4th c.), hippodrome, Piazza Armerina (4th c.). For Africa, see Ghedini F. and Bullo S. (forthcoming) "Late antique domus of Africa Proconsularis: structural and decorative aspects", in *Housing in Late Antiquity: From Palaces to Shops*, edd. L. Lavan, L. Özgenel and A. Sarantis (Late Antique Archaeology 3.2) (Leiden forthcoming) Humphrey J. H. (1984) "Two new circus mosaics and their implications for the architecture of Circuses", *AJA* 88 (1984) 392–97. *Reliefs*: Obelisk of Theodosius, Vasiliev A. A. (1948) "The monument of Porphyrius in the hippodrome of Constantinople", *DOP* 4 (1948) 29–49. *Manuscript depiction*: "Charioteer Papyrus": Weitzmann K. (1977) *Late Antique and Early Christian Book Illumination* (New York 1977) 42–43, pl. 6. *Glass circus beaker*: Trier Inv. 914 Goethert-Polaschek K. (1977) *Katalog der Römischen gläser des Rheinischen Landesmuseums Trier* (Trierer Grabungen und Forschungen IX) (Mainz 1977) no. 104.

7. Other

Wrestling arena: Lib. *Or.* 10 (on the Plethron, at Antioch). Gaming rooms: Stobi, casino: see Wiseman J. *Stobi: A Guide to the Excavations* (Belgrade 1973) 74–75. Abu Sha'ar , Egypt: Mulvin L. and Sidebotham S. E. (2004) "Roman Game Boards from Abu Sha'ar (Red Sea Coast, Egypt)", *Antiquity* 78 / 301 (2004) 602–17.

RELIGIOUS SPACE IN LATE ANTIQUITY

Luke Lavan

Temples

Much has been written about the disuse and destruction of temples in Late Antiquity, but there has been far less interest in temples as working cult centres in the 4th to 6th c. A.D. This is partly because of the nature of the evidence. Some regions have not so far produced a single trace of Late Roman evidence for pagan cult, as a result of poor excavation strategies and the neglect of rural sites where continuity was greater. New temples of the 4th c. are very few, though two important new examples of early 4th c. date are known from tetrarchic imperial estates at Split and Romuliana. Within cities, a handful of new examples from are known: at Hispellum, Argos and Constantinople. Urban repairs are attested, especially in Africa, Italy and Greece, but often depend for their visibility on local epigraphic habits. Urban restorations are also known from archaeology (at Rome, Ostia, Ephesus and possibly Athens), and from literary sources for the East. Such repairs are generally confined to the 4th c. Rural shrines show signs of repair and use later than those in cities, in both East and West, up to a century after the closure of urban temples (Horne (1981), Caseau (2004)).

The destruction or re-use of many urban temples has affected the survival of pertinent archaeological evidence for their use as cult buildings, though the sunken nature of Mithraea has assisted preservation. Rural shrines survive much better, though they have only been excavated in a few regions, such as Britain, Gaul, Spain and Greece. This means that votive and other religious deposits are largely unknown in urban contexts. They are known on mountain / cave sanctuaries in Greece and at rural shrines and holy wells in the West. No complete buried temple treasures have so far been recovered; however, cult statues carefully-buried in Late Antiquity are known in some regions. Some behavioural epigraphy exists, in the form of 4th c. curse tablets from sanctuaries. Depictions are few, and tend to concentrate on sacrifice before altars, either animals in the case of tetrarchic emperors, or incense in most other cases.

L. Lavan, E. Swift, and T. Putzeys (edd.) *Objects in Context, Objects in Use* (Late Antique Archaeology 5 – 2007) (Leiden 2007), pp. 159–201

Literary sources, though providing some compelling details on changes in religious practice, are not wholly reliable: pagans, after the late 4th c. had little reason to publicise their ceremonies and much of what we know about some cults is based on the résumés of Christian commentators, who inevitably look at temples with a Christian agenda. Nevertheless, we possess some pagan descriptions of ceremonies, and accounts of specific events, which provide details of rituals or cult objects found in shrines. Some Christian literary sources provide brief descriptions of the caches of ritual objects uncovered during Late Antiquity, mainly relating to Mithraea. Otherwise, one is obliged to refer to earlier documents, such as inventories of Egyptian temples, which run up to the mid-3rd c. A.D.

Whether it is wise to rely on documents from earlier centuries is an open question; pagan cult did not only show continuity with earlier practices, but also much change. This was sometimes as a result of internal developments, as much as from competition with Christianity and imperial interdictions. However, it remains necessary to use Middle Imperial religion as the starting point for 4th c. developments, especially as the traditions of earlier times were often cherished by late antique pagans. Cult buildings can still be divided into a number of types: public temple complexes with *aedes* in a *temenos*, or private cult rooms, such as those of Mithras, perhaps hidden within the urban fabric. In most public cults the ordinary public was confined to the *temenos*, whilst mithraea etc were intimate meeting halls for participatory ceremonies. The public temples were, already in the mid-4th c., less often the scene of animal sacrifices, as the popularity of such practices declined in favour of acts such as incense sacrifice, and the recital of hymns. In his *Misopogon*, Julian gives a memorable description of what he hoped an Antiochene sacrifice might resemble, and the contrasting reality that he encountered during his stay in the city.

From the late 4th c., pagan ceremonies were no longer possible in urban cult buildings, though this was not true of the countryside. A number became museums, with cult statues retained or assembled within them. Spoliation and demolition is common throught the empire, though far from universal. Sometimes positive decisions were made to preserve temples as monuments (e.g. Cod. Theod. 16.10.8 (A.D. 382)). In some regions, deliberated conservation allowed some temple ornament to be retained into the 6th c.—as was most obvious at Rome. In a few cases (such as Ghirza and Philae) major temples survived longer, with Philae retaining its cult statues, to the 530s.

On the interiors of working temples and their objects, we have a few indirect clues. Cult statues were still a focus of emotion in temple cult, as stories from 4th c. Antioch or 5th c. Alexandria make clear. The Expositio written in ca. A.D. 346–58 evokes the smell of perfumed incense from both censers and incense-impregnated cloths in temples at Alexandria, whilst Ammianus mentions candle-lighting at Antioch. Votive offerings are known from rural temples in the West for the 4th c. (coins from Mithraea) and from Greece for the 4th to 6th c. (lamps from mountain tops and fountains). According to Eusebius, Constantine removed some temple treasures, excepting objects without monetary value, as part of his confiscations of temple property. But a law of A.D. 365 confirms the continued existence of temple guardians, suggesting that some still had objects of value, though this is unlikely ever to have been true of all minor shrines, many of which could have been unguarded. Even after confiscations, some traditional sacred objects will have remained until the definitive closure of cult sites, as it appears from the Expositio Totius Mundi. Anecdotes about the discovery of caches of pagan cult objects in early 5th Alexandria (a mithraeum) and for 6th c. Constantinople, indicate the survival of wooden objects and pictures in places where pagan rites were still practiced.

Some idea of the objects used in procession and sacrifice may be derived from tetrarchic reliefs, or from accounts of Julian's processions, and from Libanius and other authors. Pagan healing rites did exist, but we have no direct information for this period. Divination may have required special equipment, as it had done earlier. The closest one might get to the contents of late temple cupboards, is perhaps the 6th c. coptic magical papyri which list ingredients for spells etc, which may represent (at some distance) materials found earlier in major temples. One occasion, outside of temples, where pagans used objects ritually was in funerary feasts, which sometimes find their reflection in 'pagan' grave goods. Although not directly related to temples, these assemblages along with amulets and talismans give us an idea of the total material world, outside of the temples, in which late antique paganism operated.

Syntheses: G. W. Bowersock, *Hellenism in Late Antiquity* (Ann Arbor, Michigan 1990); Trombley F. R. (1993) *Hellenic Religion and Christianization, ca. 370–529*, 2 vols (Leiden 1993). Bagnall R. S. (1993) *Egypt in Late Antiquity* (Princeton 1993) 261–73. See also Sauneron S. (1962) *Les fêtes religieuses d'Esna aux derniers siècles du paganisme* (Cairo 1962) and Trombley F. R. (1985) "Paganism in the Greek world at the end of Antiquity: the case of rural Anatolia and Greece", *HThR* 78 (1985) 327–52. For Early Imperial background and an

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Churches

Sources for the interior space of churches are many, from architectural fixtures, depictions, liturgies, textual anecdotes, inventories, hoards of church treasures, and very occasionally, the objects found *in situ*, in church destruction deposits. Architectural evidence is abundant, although we know less about wall decoration than we would like: wall-plaster and wall-mosaic are largely missing for most regions. As a consequence we miss figural themed decoration that might better help define functional space, except at St Catherine's in Sinai and a few cases in Italy. Features such as baptisteries, synthrona, altars, annexe tables and liturgical screens are traceable from floor markings. These architectural fittings are best preserved in churches in the Levant, where fittings such as reliquaries and cupboards have also been found, as shown by the paper of Vincent Michel in this volume. A detailed description of these features can prove very useful in reconstructing church interiors in Late Antiquity. Of special interest is the church at Petra, of which a full description of the stratigraphy has been produced, including a well-preserved destruction deposit and phasing of the church, as well as a detailed description of papyri with their contexts.

In general, however, most researchers do not seem to be convinced that liturgical practices can be easily deduced from the archaeological record and that for this matter we have to rely on textual sources. The most accurate descriptions can be read in the liturgico-canonical literature, starting at the end of the first century with the Didachè. These texts were translated and copied, and additions have been made to the series of original canons. Some regions are better known than others: Syria provides us with differents sources, Italy on the other hand is poor in this type of literature. Church councils sometimes provide us wth glimpses of the liturgical ceremonies. Most of the time, however, they reveal what was forbidden. On the whole, we are able to reconstruct baptismal and eucharistic ceremonies. Early liturgies, and very detailed descriptions of church services are few and far between.

Despite this we are able to talk of basic liturgical organisation. Celebrations were based on the chanting of psalms, the reading of the Scripture or of other ecclesiastical texts (letters, Saints' lives). Mass was divided in two separate times: one for everyone, including catechumens and heretics, one reserved for the baptized orthodox Christians of that particular congregation. Heretics sometimes listened to psalms and readings and usually left before the sermon. Imperial letters also eventually came to read in church, even on secular subjects, and many sermons make clear that churches were used as meeting places, as well as for prayer. Members of the congregation might sometimes come to show off their wealth or to eye members of the opposite sex, according to sermons designed to combat this behaviour.

We have some information on where people stood within churches during services: anecdotes in a variety of texts sometimes allow us to reconstruct spatial divisions amongst the congregation as well as the clergy. The dress of the clergy is fairly easy to reconstruct from literary and pictorial evidence. Liturgical furnishings, such as reliquaries and valuable tapestries, are described in the *Liber Pontificalis* and surviving inventories. A different perspective on objects of value used in churches comes from hoards of church silver, such as that from Water Newton in Britain, Kumluca ('Sion') in Lycia, and Kaper Koraon near Antioch, and some church treasures that have survived above ground into the modern period. Site finds from the Near-East also reveal objects known from inventories, often less valuable than those in hoards. However, matching finds to names of objects in texts is not straightforward. Depictions, from mosaics and manuscripts, mainly come from the Western Mediterranean (or the Levant), and are heavily idealised.

The essential functions (religious or social) of church buildings are not in doubt, nor are the main objects involved in the liturgy, but it is still not simple to reconstruct church interiors of the period. Regional variations in spatial organisation are very great, and our evidence is far too patchy to describe them fully. The variation in object use was also significant between extra-mural martyria, city center cathedrals and rural chapels, as the inventories discussed by Caseau make clear. But despite these limitations, one can tentatively reconstruct some functional categories of objects used in different activities, such as the Eucharist. Because of the complexity of the evidence it is likely that we will only ever possess imaginative evocations of the interiors of selected churches, drawn from many different sources, unless a church is excavated where very high-quality destruction deposits are present.

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Sanctuaries/Pilgrimage Centres

Sanctuaries attracting large numbers of visitors had existed in the Mediterranean throughout Classical Antiquity, and included a large number situated at a distance from urban centres. Thus the appearance of Christian pilgrimage centres is no surprise. They might be centred on the residence of an ascetic or the tomb of a saint, or on a site of significance to the Christian stories of the Holy Land. Pilgrims came seeking spiritual improvement, healing, or some other form of intercession from a saint, living or dead. At such places, monasteries might be built, or a major church established, which might attract chapels of wealthy patrons, facilities to cater for pilgrims, and perhaps a permanent resident service population of traders. Those found in remote districts might produce settlements of village size, or even small towns.

Those found immediately outside of cities, often built around an extra-mural tomb, might attract a *vicus christianorum*, such as grew up around the basilica of St Martin at Tours. In the West, such sites sometimes became the centre of new settlement centres, when the classical city they served contracted or expired, as occured at St Albans and Xanten. Subsequent urban development has complicated our understanding of the late antique character of such sanctuaries. In the East Mediterranean, by contrast, pilgrimage sites are often very

well-preserved, especially in remote rural locations. Here architecture survives well, along with many architectural fittings, so as to induce in visitors a strong sense of empathy with late antique pilgrims. Buildings appear to be preserved largely as they were in the early 7th c. However, statigraphic deposits relating to occupation are extremely rare: only Abu Mina has so far yielded them, as a result of a 'destruction of A.D. 610'.

Our best chance of understanding object uses in pilgrimage centres come from literary sources. These are mainly confined to ancient pilgrims' accounts; further specific information can be found in saints' lives and in miracle collections, which decribe miracles taking place at shrines. All these sources must be read with careful attention to their literary genre and context. Nevertheless, texts reveal the distinctive activities of these sites, from which we might imagine related object use: from the display of relics and miraculous objects, the veneration of the tomb by visitors, 'incubations' inside churches (as at Sanctuary of Cyrus and John, Menouthis) or holy bathing (Aya Thecla, perhaps Abu Mina judging from the baths), to the holding of festivals. Votive deposits are still very rare: at Abu Mina a crater of over 6,000 coins coins was found under the altar. Pilgrim artefacts belonging to specific sites are normally identified as a find category from other sites: these might include souvenirs such as lead or glass flask and clay or glass tokens, sometimes bearing images of the shrine or of the saint concerned. Only at Abu Mina has a large number of pilgrimage souvenirs been located at a pilgrimage site, though those found at Scythopolis (see paper by Khamis in this volume) might be associated with visits to the adjacent acropolis church. Production sites are so far unknown.

Overall, the archaeology of pilgrimage sites is still very much focused on individual sites. General conclusions have been drawn as to their architectural features, but more interpretative discussions incorporating stratigraphic discoveries are only beginning to appear, as more excavation results are available. The relationship between written sources and archaeological finds has also been little explored.

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Pilgrimage sites with good quality stratigraphic evidence: Abu Mina is the only site with relevant material so far. A destruction of 'A.D. 610' covers the main church and auxiliary accommodation and hostels. There are some rubbish deposits but the pottery is so far unpublished.

Sites with good fixtures and fittings: At Mt Nebo archaeological evidence includes fixed furniture (ambo, chancel), fittings (chains for lamps) and portable furniture (relics and reliquaries, annex tables). This type of evidence if less rich is not exceptional for eastern pilgrimage sites. Unfortunately, apart from reliquaries it is not directly associated with pilgrimage, but with wider church liturgy. However, there are indications in the plans and fixtures of pilgrimage churches of adaptation, so that large numbers of visitors could pass by the tombs of saints, at St John's Ephesus, Aya Thecla, Abu Mina, and at Carthage.

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Monasteries

Monasteries represent one of the most distinctive spatial types of Late Antiquity, for which evidence from all sources of evidence is unusually rich. The desire of individuals and communities to live a life that was recognisably different to that of the majority left its mark in the writings of the period. The emergence of separate monastic traditions stressed very different patterns of behaviour. However, monasticism as practiced in monasteries might not involve activities that were so distinctive in themselves: such as prayer, work, and domestic rituals. A lone ascete could live the life of a poor farmer, whilst a community might be organised in the villa or domus of a patron who sought spiritual rather than simply literary retreat. Yet monks were distinctive in the manner in which they engaged in these activities, that they chose

a harder life than they might have had, and that they abstained from certain activities, especially outside of the monastery. Further, the way in which daily activities were organised together made up a distinctive lifestyle, with its own evidential trace.

Although monasticism became well-established in the West, from the early 5th c., the architectural survival of monasteries is best in Egypt and the Levant, where they were often built in remote rural regions. The monastic architecture of the 4th c. is largely unknown, partly because early monasteries were based on (urban) aristocratic households, and small-scale domestic groups occupying houses. However, 5th/6th c. monastic architecture, which represents the majority of what we have, is very distinctive, at least in the Near East. Different types of community—coenobitic, eremitic or mixed—can be recognised by their very distinctive spatial archaeology. Their desire to reproduce an idealised lifestyle often gives a certain regularity to cells and other structures, making spatial analysis easier. It is tempting to organise spatial discussion of the lay-out of monasteries starting from the textual evidence: each zone apparently being used for specific purposes, easily recognised due to specific structural features. For examples of such a discourse applied in Syria, see Fourdrin (1991) and Tchalenko (1953) vol.1 163–73. However, in reality, many monastic sites underwent a whole series of changes throughout their use-life, which are apparent from the below-ground stratigraphic record (where it exists), or from the above-ground standing architecture (especially in Palestine and Syria), where it exists. For example, at Dayr Dehes in the Syrian Limestone Massif, excavation and analysis of the standing stratigraphy has produced a thorough picture of the development of a cenobitic monastic complex. Unfortunately, studies of most monastic sites have often confined themselves to the church alone.

Fixtures and fittings found at some sites make it possible to identify spatial uses, especially agriculture, on the basis of material evidence alone. This is particularly true of olive presses, but can also extend to irrigation systems, such as those supplying the desert garden of the Monastery of St. Martyrius at Ma'ale Adummim. Excavation of monastic sites has been surprisingly rare, though important exceptions have yielded information from artefactual evidence regarding the differential use of spaces. Limited artefactual evidence is preserved in Egypt though dessication, though stratigraphic recording of monasteries in the East has in general been very poor. Finds from Egyptian sites make it possible to identify craft production, based on waste deposits and occupation

levels. For example, recent excavations at Dayr al-Bakhit, Upper Egypt have revealed the presence of granaries and looms. Politis' work at Dayr ʿAin ʿAbata suggests working areas, on the basis of debris from rope and basket production, as do most excavations in Egypt, above all, the Monastery of Epiphanius at Thebes.

Nevertheless, the study of distinctive spirtual endeavours of monks relies mainly on textual evidence. Of these texts, some are normative, such as surviving monastic 'rules' (relating mainly to the West) and imperial laws. But many are descriptive, such as the accounts of pilgrims, and the Lives of Saints. The latter normally concern ascetics, and/or were written by monks. These sources are supplemented by papyri and ostraka from Egypt and Petra, and some inscriptions. Interpreting these sources is complex—because of a tendency to focus on star individuals—which means they are thus not representative as descriptions of monastic life. Yet details about the wider setting of the lives of saints (their interactions with lesser monks and the public) provide valuable evidence of contemporary communities.

'Monastic artefacts', do of course largely fall within the sphere of domestic, productive or church objects, and have received little attention, though monastic libraries are a focus of scholarly interest. It is not yet clear to what extent distinctive monastic dress types existed in Late Antiquity, as they did in later Medieval Europe, beyond saying that they wore hooded garments. Images of monks in mosaics mainly concern saints and bishops and are unlikely to be representative of the dress of ordinary brothers. Wall paintings, which are largely confined to Egypt, may be a more representative source, but what is really needed is finds of clothing from monastic cemeteries, of which very few are excavated to date.

When bringing these distinct sources of evidence together, it becomes clear that the picture that each presents is only partial. Surveys of monastic sites tend to reveal the basic structure of the spiritual life of monks, with their habitations and churches. Plans of sites also suggest something of the social organisation, both within the monastery, and also between the monastery and secular settlements (e.g. Binns (1999); Brenk (2004); Hull (2006)). Surveys also reveal some evidence for agriculture. But it is excavated finds alone which demonstrate craft production. Finally, only texts allow the full reconstruction of prayer, communal meals, care for the sick and the reception of visitors: without these texts the labels assigned to many buildings within monasteries would never have been suggested by scholars.

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Sites with stratigraphy: Sites in Egypt have produced the best stratigraphic archaeology, especially the Epiphanius Monastery near Thebes, which includes occupation and rubbish deposits, which have revealed agricultural and manufacturing tools, production waste, along with many papyri. To date this early excavation prepresents the most complete publication of archaeological finds.

High quality evidence also comes from Kelia, where abandonment levels have produced good evidence of craft and daily life. The site of Deir el-Bachit, currently under excavation, promises to produce excellent stratigraphy, with a granary and textile production already being recorded. The monastery of Aaron near Petra has produced rubbish deposits of fish bones, though this may relate to the end-use phase of the complex, not its normal functioning. Elsewhere in the Levant stratigraphic recording has been rare, with most structures being recorded by survey.

Sites with good fixtures and fittings: Sites with fixtures and fittings are known not only in Egypt but across the southern Levant. Some Egyptian sites have basins for water and basins for baskets. Agricultural installations are common: see especially Deir el-Bachit. Judean desert monasteries, are also well-preserved but lack excavation, except for a few sites such as the Monastery of Martyrius, where a good idea of the functioning of internal space is possible from fixtures and architecture. For Syrian monasteries less is known, except for the fixtures from within churches.

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Episcopia

The study of episcopia has long been bedevilled by the same essential problem that affects praetoria—laxeness of identification, whereby many large houses close to churches were assumed to be bishops' residences. If stricter criteria are applied, such as the presence of an inscription or a direct link with a church, then the number of sites is greatly reduced. The house of the bishop originally *was* the church (*domus episcopi?*). But from the 4th c., we see modest lodgings attached to the side of central urban churches. The churches greatly eclipse the lodgings, and are the real monumental focus. But from the 6th c. large episcopal dwellings appear in the East, that in the case of metropolitan bishops, seem to outstrip the largest known urban mansions of the period. These buildings were identical or very similar to the houses of the wealthy, except for their connection to churches, and perhaps for the presence of some space for administrative 'offices'. We know little of their interiors, save for a few details of the lifestyles of individual bishops, their episcopal courts, banquets, and luxurious or frugal personal life. We do not know to what extent administrative staff or charitable activities were housed within the episcopium, although details are available for Alexandria and Antioch from the life of St John the Almsgiver, and the writings of Severus of Antioch respectively.

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Christian Charitable Buildings

Christian charitable institutions appear in late antique cities from the 4th c. onwards. A number of words are used in Late Antiquity to describe them: *xenodocheion/xenon* and *nosokomeion* being the most popular. These complexes were used for a variety of functions, from providing lodging for the traveller (primary association of the *xenodocheion*), to care for the sick (primary association of the *nosokomeion*) or the poor, the elderly or orphans. These words are sometimes rather uncomfortably translated as 'hostel', 'hospital' or 'hospice' etc. in modern literature, although it is far from clear that their functions were so distinct. These institutions often grew out of the charitable work of bishops, though 4th c.

monks, one late 5th c. governor and a 6th c. emperor are recorded as founders.

At present, our knowledge of the workings of these hospitals is limited to a few brief descriptions, such as those of Basil of Casearea and Nilus of Ankara. The *Life* of Rabbula includes some information on the mens' and womens' hospitals in 5th-century Edessa, their conditions and attendants, including an emphatic comment that Rabbula made sure that beds and bedding for the sick were clean and kept clean. Monastic communities had their own tradition of care for the sick, described in similarly scattered documentation. Archaeological evidence for charitable buildings in the Late Antique period is very limited: only three such structures have been identified, and only one (at Merida) is secure. The excavated portion of the probable Hospice of Sampson at Constantinople is a series of rooms organised around a courtyard, not unlike a peristyle. The *xenodochion* of bishop Masona at Merida has two wings of cellular rooms leading off a central hall, suggesting a separation of men and women, as described at Antioch by Procopius *Aed.* 2.10.22.

Of the furnishing of charitable buildings we know only what texts reveal (straw mattresses), or can guess from analogies with domestic accommodation. Of everyday objects, the only type specific to this environment, rather than domestic space, are likely to have been the medical kits of doctors, if they were used at all. Extrapolating from Late Byzantine hospitals, we might imagine that, as well as some practical treatment of the sick, some Christian liturgy took place here, with its associated objects.

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Synagogues

The religious meeting places of Jews took on a recognisable architectural form by the 4th c. A.D. During the 5th and 6th c. synagogues are as distinct as Christian churches, and frequently include mosaic inscriptions. The fragmentary nature of surviving evidence and regional variations in synagogue form make it difficult to reconstruct a fully coherent example of internal fixtures. Nevertheless, interior stone fixtures can be detected on some sites from floor indications, or surviving architectural members. What information we have on internal fittings, whether architectural or textual, suggests a degree of local variation. For example, whether Torah Shrines were built of wood (a kind of armarium), stone, or were just a kind of niche, seems to be more dependent on local variation rather than a set 'rule'.

There are a few written references to things that happened in some synagogues in the Talmud. But the events depicted in the two Talmuds are extremely difficult to date, and might be classified as 'myths' rather than as 'events' (C. Hezser (1997) *The Social Structure of the Rabbinic Movement* (Tübingen 1997)). Regretably some scholarship has perhaps relied too much on Talmudic literature, and does not always differentiate between the Babylonian and Palestinian Talmud, the latter being most relevant for synagogues within the Roman Empire.

Unfortunately, we currently have no inventories of objects for synagogues. The rarity of occupation or even rubbish deposits associated with synagogues makes it difficult to reconstruct their contents from archaeology. Some objects were found in the synagogue excavation at Ein Gedi, near the Dead Sea, but it is not known how widespread these objects were (a metal menorah, a goblet, traces of codices or scrolls). At Sepphoris, about 100 fragments of incense shovels were found, and a suggestion was made that they were used in the synagogue, but their findspot (in a dump), and lack of any traces of burning make it difficult to reach firm conclusions (Rutgers (1999)). Such shovels do appear on mosaics, but we do not know if these depictions indicate a real object or something once used in the long-destroyed Temple in Jerusalem.

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For religious processions see section on streets in section on political and social space.

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DOMESTIC SPACE

CONTEXTUAL ANALYSIS AT SAGALASSOS

*Toon Putzeys, Marc Waelkens, Jeroen Poblome, Wim van Neer, Bea de Cupere, Thijs van Thuyne and Nathalie Kellens**

Abstract

Until recently, late antique quotidian objects were relegated to the domain of specialist studies and information relating to the context or assemblage within which the objects were found was rarely retained. The objects were studied as individual examples of form or type, rather than as part of an assemblage. The ability of archaeological evidence to contribute to the study of human behaviour largely derives from patterns in the dispersal of artefacts, however, and not simply from the objects themselves. A full description of the archaeological context of particular objects is thus required in order to maximise the recovery of data about the past. Contextual analysis, as it has been developed at Sagalassos, is used to identify human activities and their social and economic implications by carefully delineating the distribution of archaeological material, taking surrounding architecture and the process of context formation into account.

Introduction

Most studies of late antique sites are limited to the cataloguing of structural and decorative evidence. In the few instances in which a full dataset of the archaeological material at a site has been published, the non-structural remains have generally been removed from their spatial and stratigraphic contexts and are extensively described by specialists

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in a separate, and usually subsequent, section of the report.[1] Recent studies, however, argue that more comprehensive artefactual evidence should be incorporated into studies of human behaviour, as architecture and decoration reflect the intentions of the architect or owner rather than daily activities.[2] The aim of this paper is to propose a methodology for detecting patterns within found assemblages in order to classify different modes of human habitation. These modes are interpreted as representing different social and economic systems. To make such an interpretation possible, datasets of various material categories must be integrated using standardised procedures. The presentation of some preliminary results from the urban villa at Sagalassos shows the possibilities of such an approach. The town of Sagalassos, located in south-western Turkey, is very promising for contextual studies as it has been the object of systematic interdisciplinary research for more than 10 years. Interdisciplinarity at Sagalassos has resulted in a good understanding of both its history and its environment.[3] The Sagalassos Archaeological Research Project, coordinated by M. Waelkens, is currently focused on the residential, commercial and industrial areas of the town. The project provides specialists in various disciplines such as pottery, metallurgy, glass, archaeozoology and palaeo-botany, with the opportunity to recover the data necessary to carry out a contextual study.

Methodology

The methodology proposed for detecting and interpreting artefact distribution patterns consists of three steps. First, the architectural subdivision of the space is determined. Second, the degree to which the assemblage as found is representative of the original content of the room is assessed by examining the formation processes of the archaeological record. Third, the presence or absence of certain functional categories within the archaeological record is investigated using the statistical technique of correspondence analysis.

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[1] Allison (2001) 195; Ault and Nevett (1999) 43–44; Berry (1997) 183; Wallace-Hadrill (1994) 40. All these authors stress the lack of fully published artefact assemblages from sites dating to antiquity.

[2] See, for example, Cahill (2002); Nevett (1999); Allison (1999); Laurence and Wallace-Hadrill (1997); Wallace-Hadrill (1994).

[3] For the results of interdisciplinary research concerning change in the town and its territory in Late Antiquity, see Waelkens *et al.* (2006).

Architecture

The first step towards the integration of contextual data is to determine patterns in the architectural subdivision of space. Daily life takes place within a spatial framework that provides the setting for all human relations. How people interact and how activities are organised is to a great extent determined by the way that space is subdivided. Walls and doors are used to regulate social interaction by making some spaces easily accessible, while shutting off others.[4] This structuring aspect of the built environment and its importance for the organisation of activities should be taken into account when looking for patterns in the dispersal of artefact assemblages. The meaning of architecture, however, will change over time. While the intentions of the designer or first owner of a structure determine the layout of a dwelling, subsequent occupants and users of the space adapt the existing environment to their own needs and practices.[5] This is especially true for the late antique period when public monuments and large urban mansions were subdivided into smaller private units. To fully comprehend the organisation of daily activities, the architectural layout of the structures under consideration is described together with their diachronic change.

Stratigraphy and Context Formation

The extent to which the recovered assemblage is a comprehensive one should be taken into account. The "formation processes of the archaeological record", outlined by M. Schiffer,[6] are of great importance in this regard. Deposits of primary discard formed during the occupation of a structure are rare, as floors are usually cleaned periodically.[7] Objects hindering ongoing activity or regarded as waste are systematically removed in order to keep living and working areas clear for the daily activities of the occupants.[8] Only the smallest objects escape such cleaning, slipping between tiles or being stamped into the walking surface of an unpaved floor.[9] When a structure is abandoned, however, cleaning of the floor

[4] Grahame (2000) 6–14. For the social implications of the built environment see Kent (1990); Lawrence and Low (1990).
[5] Alston (1997) 25; Wilk (1990) 34–42.
[6] Schiffer (1987); Schiffer (1985).
[7] Schiffer (1987) 59; Murray (1980).
[8] Sigalos (2004) 60.
[9] LaMotta and Schiffer (1999) 21; Schiffer (1985) 24–25.

ceases and material is discarded close to the place where it is used or consumed. Such deposits can contain enough material linked to the last phase of occupation to constitute an assemblage that approaches the original content of a room. Schiffer named such contexts "de facto deposits".[10] In most cases, however, abandonment takes place gradually, and individuals may return to structures intermittently, disturbing the original primary deposits. Most material linked to the occupation of the structures has then been removed, leaving us only a small portion of the former room content. When approached with care, however, such deposits reveal evidence from the process of abandonment and from post-abandonment usage of the rooms, particularly when data from a variety of sub-disciplines are considered together.[11]

Finally, many contexts are formed through the systematic deposition of refuse. Artefacts from such contexts are by definition not functionally related to the place in which they were found. If such deposits can be linked to an activity area, however, they can provide substantial information about patterns of consumption and spatial organisation.[12] To identify the processes of context formation at Sagalassos a detailed micro-stratigraphical analysis was carried out. In this paper, however, the micro-stratigraphical units are grouped into layers in order to create larger units with assemblages that can be compared in a reliable manner using statistical methods. These layers are uniform packages of sediments with a similar content and were either deposited in a single action or gradually accumulated over several years. A description of their composition is provided to identify the formation processes at play.

Data processing

The final step involved in contextual analysis is the study of the artefact assemblages themselves. Data from artefacts and ecofacts must be collected, ordered and integrated. In the first place, this requires the identification of relevant functional groups. The specific characteristics of each material category, however, make it impossible to define a universal set of functional groups and they necessitate the use of par-

[10] Schiffer (1987) 89–98; Schiffer (1985) 26–29.
[11] Ault and Nevett (1999); Schiffer (1985) 25.
[12] Schiffer (1987) 58–64.

ticular methods for collecting and ordering the data. In the end, only a systematic quantification of the material permits the association of numerically large and typologically diverse components of archaeological assemblages. Quantification allows the identification and evaluation of patterns relating to the different functional groups within the data of each material category.[13] These patterns can then be interpreted in relation to their spatial distribution. Once established, the findings of the various sub-disciplines employed can be integrated in order to define indicator packages, i.e. classes of artefacts and ecofacts which, when found together, serve as evidence of some past state or activity.[14] Statistical methods help to alleviate subjective biases when looking for these indicator packages,[15] despite the fact that these methods fail to take into full consideration all the issues such as context formation and multi-functionality of rooms and objects.[16] The statistical technique of correspondence analysis[17] allows the grouping of assemblages with comparable properties while still indicating specific characteristics of these groups.

Correspondence analysis is similar to principal component analysis (PCA), and is particularly appropriate in looking for patterns in contingency tables (frequency tables containing a count per variable for each observation). Correspondence analysis allows the calculation of correlations within the table and the representation of these correlations on a two-dimensional scatter plot of variables and observations. The technique converts the value of each cell in a table into a percentage of the total value for the row and the column. The correlation between rows and columns is then expressed in the form of linear combinations, called components, of which the first two account for the most of the total variance. The values of these first two components, for each context and for each functional category, can then be plotted against orthogonal axes. This results in a scatter plot in which assemblages (indicated on the graphs with dots) are plotted close to the functional categories (indicated on the graphs with diamonds), which best match them. In this way, the relations between functional groups and assemblages are made

[13] Putzeys, Poblome and Bes (in press).
[14] Kenward and Hall (1997) 665.
[15] Allison (2001) 196.
[16] Cahill (2002) 72.
[17] Greenacre (1989); Shennan (1988) 283–86. For some applications of correspondence analysis to archaeological data see Baxter (2003) 136–43.

visible. As an example, one can examine the correspondence analysis-plot of the ceramic data (fig. 4). The first component, plotted against the X-axis, represents 55.71% of the variation within the data and separates assemblages with a higher proportion of vessels for cooking, food preparation and serving (situated on the left side of the plot) from assemblages determined by vessels for the storage of local agricultural products, imported ware and tableware vessels (on the right-hand side). The second component, plotted against the Y-axis, explains 22.23% of the variation within the data and divides the assemblages into a group with a higher proportion of vessels for cooking, food preparation and storage (in the upper part of the graph) and into a group with a higher proportion of serving vessels, vessels for consumption and imported ware (in the lower part). By taking both components into account, it is possible to roughly identify 4 groups of assemblages with a similar composition. The other graphs are read in the same way.

The Urban Villa at Sagalassos

To illustrate the possibilities of this methodology, the material of several late antique contexts from the urban villa at Sagalassos will be presented. The villa (fig. 1) is situated in the eastern part of the town, next to one of the main axes connecting the central with the upper part of the town. In the mansion, 5 principal areas can be distinguished according to architectural and decorative features. The south-western part of the house consists of a series of partially excavated rooms arranged to the west of a paved courtyard (13). North of this courtyard, a private bathing complex was identified, with an *apodyterium* (9), a *caldarium* (10) and two other rooms that were originally provided with a hypocaust system (15–16). In the south-east, a section of the house was constructed around a small courtyard (25). South of these two courts, two partially preserved rooms (40 and 43) were identified on the basis of their imposing architecture and rich decoration as a possible dining area. The main reception area (22) was situated at a higher level, in the north-eastern part of the house. A detailed study of the architecture by Marc Waelkens distinguished 6 building phases of the villa.[18]

[18] Waelkens *et al.* (in press).

Fig. 1 Plan of the urban villa at Sagalassos.

Phases 1 and 2: The oldest structures are situated in the southern part of the house, and include a continuous arcade of brick pillars surrounding the southern and eastern sides of a large courtyard formed by spaces 13, 19, 21 and 39. The date of this construction has not yet been established, but the use of brick at Sagalassos is only attested from the first half of the 2nd c. A.D. onward, suggesting that this area was built after this date.[19] At some date subsequent to the construction of this area, the east wall of the arcaded gallery was dismantled, and a second courtyard was created to the east.

Phase 3: Before the 4th c., the two courtyards were bordered by arcaded galleries along their south and east sides. A nymphaeum (19) with two apsidal walls, faced with brick, was built between these galleries. The villa was now centred on the two courtyards, separated from one another by an arcaded galley leading towards a fountain. It appears that courtyard 25 was shielded from public view, indicating that it might have been the centre of the private quarters of the house.[20] North of room 32, a corridor (room 26) carved into the limestone bedrock gave access to a row of rooms located at an intermediate level (rooms 23, 24 and 27). The size of the entire villa of the imperial period is uncertain, but with its two arcaded courtyards it echoes the aristocratic peristyle house form, which by the mid 4th c. had become part of the common architectural vocabulary throughout the empire.[21]

Phase 4: In a fourth building phase, dated to the 4th c. on the basis of pottery recovered from foundation trenches,[22] the private bathing complex (rooms 9, 10, 15 and 16), a tentatively identified dining area (rooms 40 and 43) and a reception area were added to the building. The reception area was situated at a higher level and consisted of a large hall (room 22) giving access to two rectangular rooms (31 and 44). The hall itself had a separate monumental entrance with a staircase (36) and two antechambers decorated with polychrome geometric mosaics (17 and 35). Such reception areas became common in private residences from the 4th c. onward, when houses became the sites from which the elite wielded political power.[23] The presence of such rooms, designed to

[19] Waelkens (2002) 349.
[20] Sleeping quarters were frequently secluded from the more public rooms of the house. See Ellis (2004) 41.
[21] Ellis (2004) 38.
[22] Waelkens *et al.* (in press).
[23] Ellis (2000) 71.

impress guests, supports the identification of the complex as a palatial dwelling for one of the *prôteuontes* or provincial aristocracy.[24]

Phase 5: After an earthquake struck the region at the beginning of the 6th c.,[25] the house was largely restored. Although the walls of this reconstruction phase are of a lesser quality, the mansion still maintained its 'palatial' character. On the upper floor of the house, efforts were made to preserve the ostentatious character of the reception hall (22). Its southern wall was completely rebuilt and the hall was connected to the 4 small rooms south of it. The installation, in one of these rooms, of a settling tank for collecting water from the cleaning of the reception hall might indicate that this last room was transformed into a dining space.

Phase 6: From the second half of the 6th c. onward, the organisation of the building changed drastically. During this period, the mansion was divided into smaller units with different functions or into separate apartments and apparently lost its representative character. The reception hall (22) and the two rooms north of it were stripped of their stucco facings and marble floors and could have been used for various purposes. In the southern part of the villa, the arcaded galleries surrounding courtyard 13 were subdivided into small rooms. Some of the doorways in the bath section were also closed off, whereas its two eastern rooms (15, 16) were given a different function, which led to the removal of the hypocaust floor. Apparently, there was a change in the function of these parts of the villa in order to address new conditions that arose in Late Antiquity.[26] The housing unit was finally abandoned sometime before an earthquake destroyed the site completely around the middle of the 7th c.[27]

In the following section, two areas of the residential villa are discussed in more detail: the courtyard together with an adjacent vaulted room in the south-eastern part of the house (25 and 28) and the 4 small rooms south of the reception hall (rooms 23, 24, 26, 27). The archaeological material recovered from these areas can be attributed to the last building phases of the villa between the second half of the 6th and the first

[24] Waelkens *et al.* (in press).
[25] Sintubin *et al.* (2003) 6–15.
[26] The subdivision of existing buildings into smaller units is characteristic for this period. See Ellis (2004) 47–50; Ellis (2000) 110.
[27] Waelkens *et al.* (2000) 379.

half of the 7th c. This date coincides with the relative chronological phase 9 of the locally produced Sagalassos Red Slip Ware.[28]

The Courtyard Area

Architecture

The courtyard (fig. 2) in the south-eastern quarter of the urban villa was surrounded by a series of partially excavated rooms. The court (25) was paved with limestone cobbles embedded in mortar and beaten earth. Along its eastern and southern sides the courtyard was bordered by a row of brick arches, behind which a frescoed gallery (33) was located. The brick piers supporting these arches rested on irregular limestone block socles. These socles were not intended to be visible, which suggests that the cobbles are the substratum of an earlier, possibly more elaborate, floor. Although the room probably provided access to the private quarters of the house, it was used as a stable during the last occupation phase of the mansion (building phase 6). The original floor from the court was removed and fodder troughs were installed underneath arches separating the court from a surrounding gallery (fig. 3). Beam holes in the west wall indicate that the courtyard now became a covered space. A vaulted room north of this courtyard (room 28, situated immediately underneath room 24 on fig. 1) was accessible through a large brick arch. The floor of this room consisted of mortared stones. Its walls were built with regular pumice blocks alternating with courses of brick, and showed clear evidence of burning up to their upper part. The room gave access to a system of corridors through a small doorway.

Contexts

For the courtyard, two deposits could be attributed to the last occupation and subsequent abandonment of the building. Layer 4 contained destruction debris from the collapsed walls and roofs surrounding the court and material left behind when the structure was abandoned. Ceramics from this layer included many sherds with clean breaks, some of which could be refitted. Layer 5 was a thin layer situated immedi-

[28] Poblome, Bes and Degryse (in press).

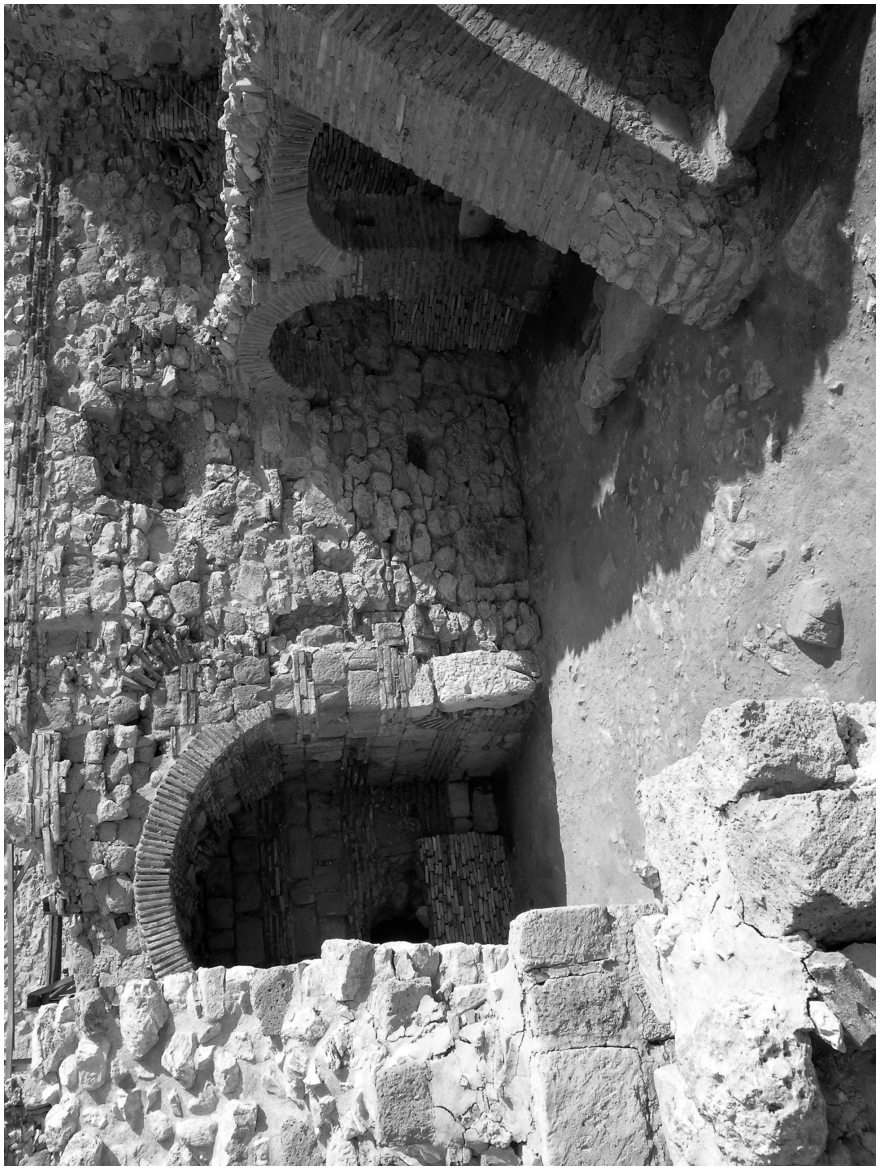

Fig. 2 Courtyard 25 (picture taken from the south). The vault at the rear gives access to room 28. Above this vaulted space, room 24 is situated.

Fig. 3 One of the fodder troughs installed in the arcade between rooms 25 and 33.

ately on top of and in between the cobbles of the court. The tableware sherds from this layer showed traces of heavy trampling, indicating that the deposit was formed through the continuous loss of small objects and the accumulation of soil and refuse. The formation of this layer must have taken place after the removal of the original floor. Inside the vaulted room (28) north of the courtyard only two layers could be distinguished: one containing destruction/erosion material and one corresponding to layer 5 of the court. Inside the vaulted room, however, this last layer was burnt.

Material Evidence

Ceramics

At Sagalassos, the ceramic material recovered from each context is quantified by counting and weighing the sherds.[29] The combination of both counting and weighing makes it possible to infer the extent of fragmentation within each deposit, which in turn provides indications about the formation processes of the context. Sherd weight, however, is not appropriate for comparing the proportions of functional groups, as these comprise various vessels types with very divergent morphology and size. The use of sherd counts is better applied to comparing the composition of different assemblages. The application of sherd count data relies upon the assumption that the relative breakage rates for different vessel types are similar within each assemblage.[30] This means that if twice as many sherds of a vessel type A than vessel type B are present in a deposit, this ratio should hold in all assemblages in which both types A and B are present, regardless of the processes that played a role in the formation of the deposits. Although this assumption does not always hold true, a systematic quantification of sherds results in comparable sets indicating the proportions of vessel types present in the original population of the contexts.[31] Any biases caused by differences in fragmentation can be rectified during the interpretation of the data through taking sherd weight into account. To facilitate the identification of functional differences, vessel types were classified into 6 main

[29] Poblome (1999) 182–83.
[30] Orton (1993) 179.
[31] Shott (2001) 712.

groups.[32] The first group contains open tableware vessels such as cups, bowls and dishes. It is assumed that these vessels were primarily used to eat and drink from, and that their presence indicates consumption. The second group includes pottery used for serving food or drinks, such as jugs and *lekaneis*.[33] A third group contains vessels used to process food (such as mortaria), or to move or temporarily store small amounts of substances (such as coarse ware jars). The fourth group comprises cooking pots and frying pans. The fifth group includes large vessels for the storage and transport of regional agricultural products, such as locally made amphorae and larger dolia. The last group comprises imported amphorae, whose presence indicates the storage of imported goods.

Only the ceramic assemblages of layers 4 and 5 of the courtyard were incorporated into the analysis, as room 28 north of the court did not contain enough sherds to be meaningful in the statistical analysis. The almost complete absence of pottery in this room might indicate that ceramic vessels were not stored and were scarcely used in the room. The correspondence analysis plot (fig. 4) of the sherd counts shows that both layers of the courtyard (R25_L4 and R25_L5) had a high proportion of sherds from imported amphorae, from vessels for the storage of local agricultural products and from tableware. Among the imported pottery were Late Roman 1 amphorae which probably contained wine or oil from the northern Levant or Cyprus,[34] and Late Roman 4 amphorae which probably contained wine from Gaza.[35]

Bone

The animal bones were collected by taking sediment samples and sieving them through meshes of 4 and 2 mm. The bones were identified and quantified according to the number of identified specimens (NISP). Although this method is not suitable for making inferences about the original proportions of taxa within an assemblage,[36] it facilitates presence/absence comparisons between assemblages. Study of the material indicated that it was most useful to initially lump species into larger groups and refine these groups later. Initially the taxa were grouped

[32] Putzeys, Poblome and Bes (in press).

[33] A small container used as a formal mixing bowl for wine as well as for all sorts of domestic purposes. See Sparkes and Talcott (1970) 211.

[34] Peacock and Williams (1986) 185–87.

[35] Peacock and Williams (1986) 198–99.

[36] Ringrose (1993) 125–26.

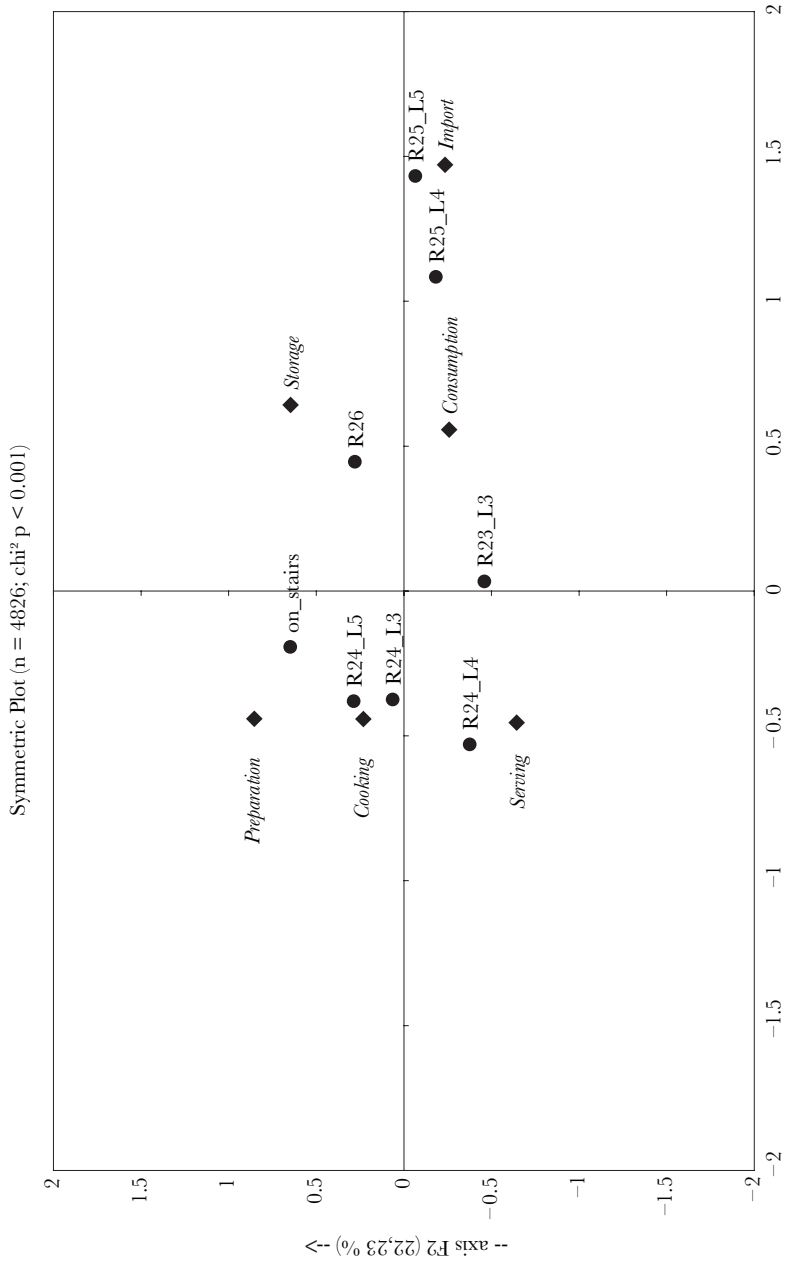

Fig. 4 Correspondence analysis plot positioning contexts (indicated with dots) next to functional vessel categories (indicated with diamonds).

into the categories of domestic animals, wild animals, intrusive rodents and fish. On the scatterplot (fig. 5) the clear abundance of bones from small intrusive rodents like hamster and mouse in room 28 is remarkable (R28_L5). Closer examination revealed that the bones of these rodents originate from a very small area at the entrance, near the corridor system beneath the vaulted structure. A likely explanation is that the concentration of these bones was caused by the systematic deposition of owl pellets. The samples from the two layers on the courtyard itself (R25_L4 and R25_L5) contained few animal bones per litre. The assemblage from these layers had a higher proportion of bones from consumed domestic animals (especially pig and chicken) and fish. They seem to represent consumption refuse. Small bones prevailed in this assemblage, probably because they escaped refuse removal.

Plant Remains

The plant remains were collected by means of flotation. The seeds were gathered by sieves of different mesh sizes (4 mm, 2 mm, 1 mm and 0.5 mm), dried, identified with a microscope and counted. To interpret the recovered botanical remains, the seeds were classified into 8 groups: cereals, legumes, plants with edible fruits, weeds from cultivated fields, wetland and water plants, plants that grow in disturbed areas, grass- and meadowland plants, and finally wood- and shrubland plants. Seeds from the first 5 groups are regarded as consumption refuse, while material from the remaining groups indicates the presence of plants unfit for human consumption.

The scatter plot (fig. 6) presents the content of the various contexts plotted next to the relevant categories. It is immediately clear that room 28 (R28_L5) differs from the other rooms. The vaulted room was particularly rich in all categories of palaeo-botanic material and contained plant remains not found in the other areas. Among the material recovered from this room were many cereal fragments such as barley, emmer wheat and bread/macaroni wheat. In addition to the grains of these species, threshing remains like spikelet forks and rachis fragments were found. Legumes, including grass pea, pea and lentil, and plants with edible fruits, such as olive, grape and hackberry were also present. Seeds of grass- and meadowland plants and of weeds commonly found in cultivated fields were also encountered. What makes the room unique among the areas presented in this paper, however, is the presence of plants that grow in disturbed areas, from wetland plants and from wood- and shrub land plants. This last category is especially well represented by the needles of pine trees.

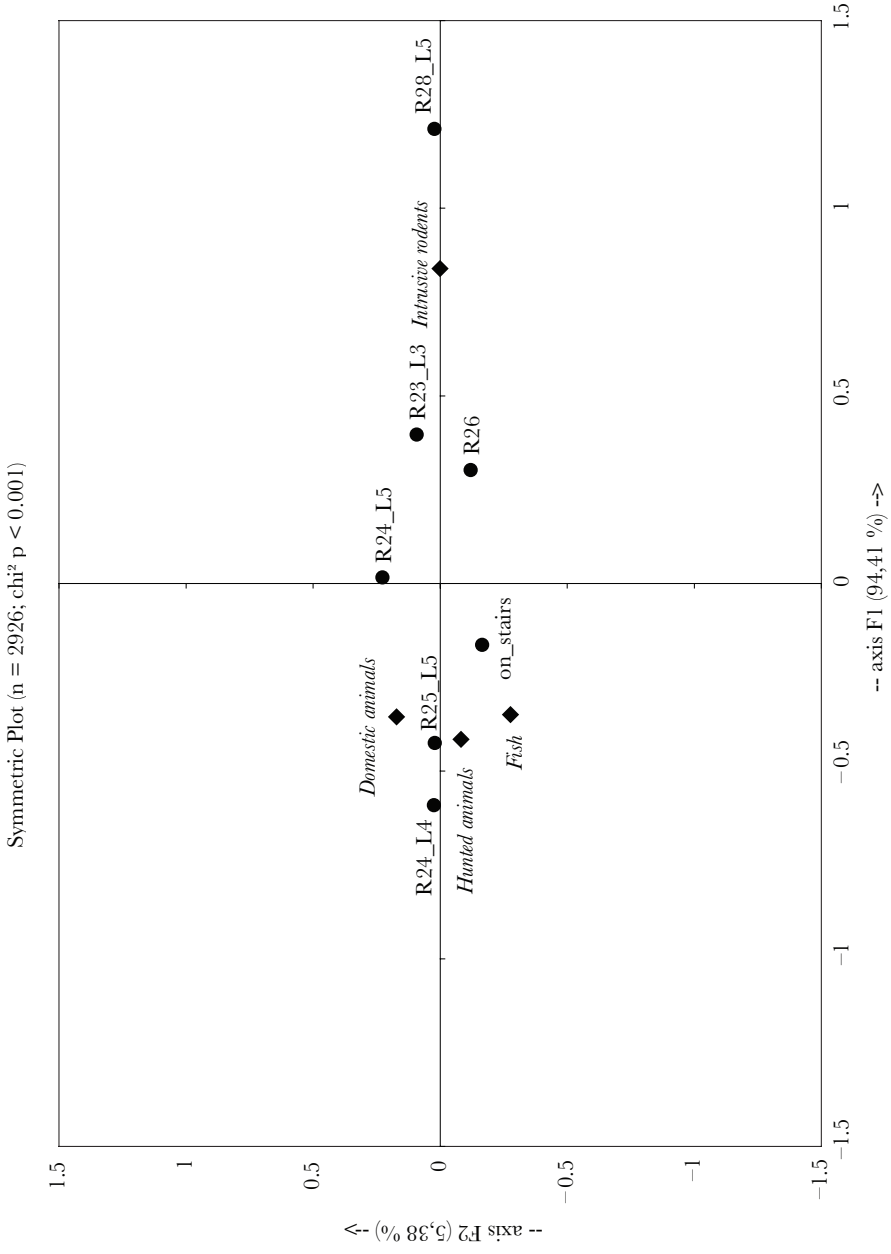

Fig. 5 Correspondence Analysis plot positioning contexts (indicated with dots) next to the main animal groups (indicated with diamonds).

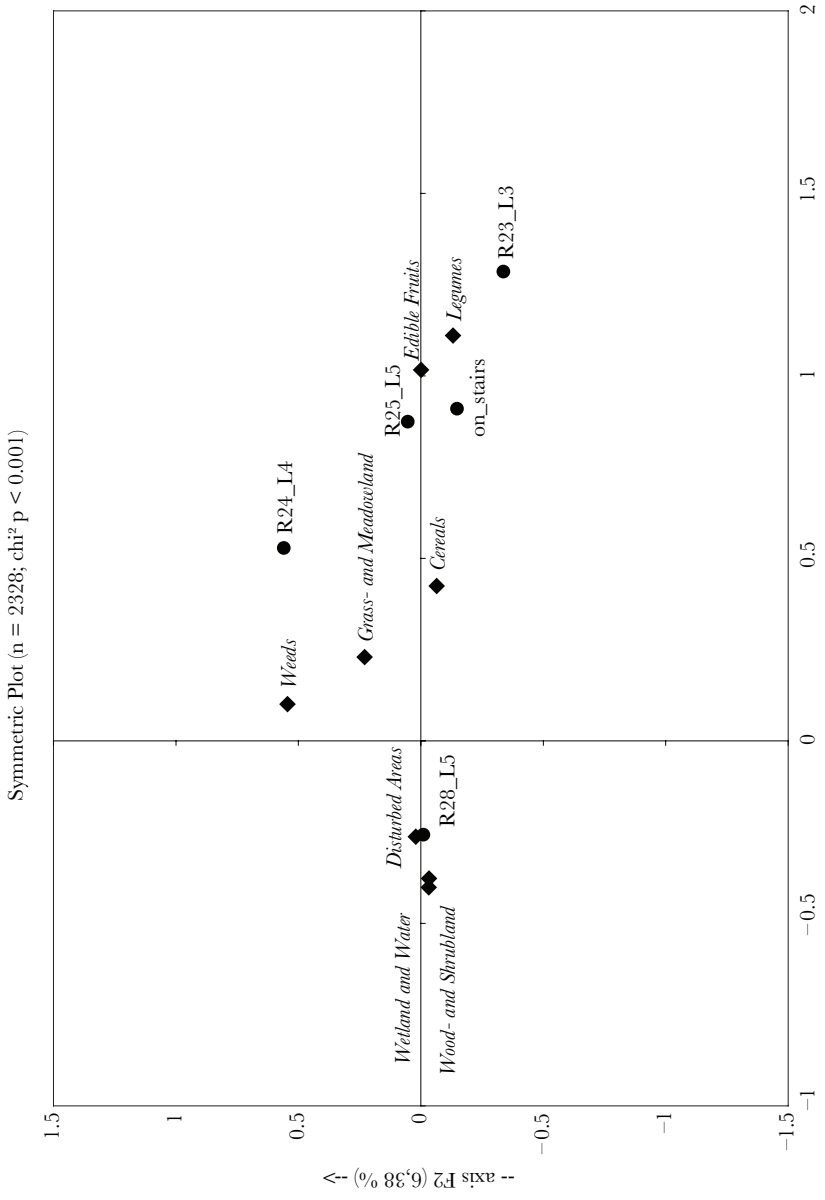

Fig. 6 Correspondence Analysis plot positioning contexts (indicated with dots) next to the main groups of plants (indicated with diamonds).

The most likely explanation for the carbonisation of this material is their presence in animal dung.[37] Because seeds commonly pass through the digestive system of sheep, goats and cows, their dung contains a great deal of undigested plant remains.[38] These plant remains originate from diverse areas, since herds are taken to grazing spots such as fallow fields and wetland areas in the valleys, and to wood- and grasslands higher up the hillsides, passing along roads and through anthropogenically disturbed areas. The presence of animal dung in room 28 corresponds with the usage of adjoining room 25 as a stable. That threshing remains were present in the vaulted room indicates that it was used as a storage room or a production site for dung cakes, as chaff remains were often added to the cakes. The large amount of needles found in the room indicates the presence of pine branches. These branches could either have been used as fuel to light fires or they could have been mixed with the dung cakes to make them more flammable. The occupation layer in the room was burnt and, together with traces of fire up to the top of the walls of this room, indicates that a fire eventually charred the remaining dung cakes.[39] The storage of dried dung cakes is still a common practice in Turkey (e.g., in Taşkapı or in Gökpinar close to Sagalassos).

The material from the court (R25_L5) contained a higher proportion of remains of subsistence plants, among which were relatively large amounts of oat and grass pea. Both of these plants were also grown as fodder, however, and may further confirm the presence of animals in the space.

Small Finds

Metal objects, coins and other small finds do not lend themselves to statistical analysis, as they are not found in bulk. The presence of certain utensils, however, can be highly indicative of the use of a space and should therefore be included within any functional analysis. Like the other material categories, the small finds will be described and attributed to a functional group. The functional groups used in this paper for the

[37] Van Thuyne in Putzeys *et al.* (2004) 49; Wright (2003) 582; Miller (1984) 71–79.

[38] Kenward and Hall (1997) 666–71; Townsend (1974).

[39] Van Thuyne in Putzeys *et al.* (2004) 52.

small finds are comparable to those distinguished by N. Crummy.[40] Her classification, however, was adapted to the peculiarities of the material at Sagalassos.[41]

Room 25 contained three metal household implements (a copper alloy needle, a copper alloy spoon and an iron knife blade) and one furniture element, namely the copper alloy hinge of a small wooden box. In addition to these metal objects, a limestone mortar was found. Overall, these finds indicate the storage or use of household implements. Although small portable metal objects such as jewellery and personal ornaments are reliable indicators of frequently used passageways in Sagalassos, none were documented for the courtyard area. Their absence might be a consequence of the changing use of the area during the last occupation phase, when the courtyard lost its function as a passageway and its floor was removed. In contrast to the few small finds, a relatively large amount of nails and other architectural fittings was retrieved from the court, along with several roof tiles. Together with the beamholes situated in the west wall of the court, for which no counterparts were found above the arcade on the eastern side of the space, the nails and roof tiles might indicate the presence of a late roof. However, they might also originate from the collapse of the roofs of the surrounding arcade. No metal objects were retrieved from room 28.

Only a few small, worn and undatable coins were found on top of, and between, the cobbles of the court and from room 28.

Interpretation of the data

Three contexts were studied, two of which were formed by the slow accumulation of soil and refuse, while one contained material associated with the abandonment of the structures. The architecture indicates that the courtyard (25) was at least temporarily used as a stable with fodder troughs installed between the arcades bordering the court. During the same period, a roof might have been constructed to cover the court, as indicated by the large amount of nails and roof tiles found in this space. The ceramic assemblage was defined by vessels for the storage of local agricultural products and imported goods. The high propor-

[40] Crummy (1983).
[41] Kellens (in preparation).

tion of sherds from Late Roman 1 and Late Roman 4 amphorae was remarkable. Few animal bones were retrieved from the court, suggesting regular refuse removal. The metal and stone utensils found indicate the storage or use of household implements in the court. From the very rich palaeo-botanical assemblage that it contained, the burnt occupation layer in adjacent room 28 suggested the storage of dung cakes. The presence of animal dung corresponds with the use of the court as a stable. The concentration of bones from small, intrusive rodents, as found in owl pellets, might indicate an owl's nest underneath the covering of the vaulted room. Almost no ceramics or small finds were retrieved from this room, indicating that the presence of perishable goods (such as dung cakes) left no room for the storage of other products or for carrying out activities. Apparently, the function of both spaces changed during the last occupation phase of the house. During this period, from the second half of the 6th till the first half of the 7th c., the space was at least temporarily used as a stable and for the storage of various items.

The Intermediate Level

Architecture

The second area, on which the remainder of this article concentrates, comprises 4 small rooms situated at an intermediate level between the eastern courtyard (25) and the reception hall (22). Originally, this area consisted of two separate rooms: an almost square room in the west (24) and a rectangular room in the east (23, 27) which were connected via a small corridor (26) with the southern part of the mansion (building phase 3). When the villa was reorganised in the first half of the 6th c., the small rooms were linked to the rooms in the northern part of the house (building phase 5). A new entrance and a window were installed in the southern wall of room 22, which was reconstructed together with the south-eastern pillar supporting the vault covering the room. The original entrance in the south-east was closed, and in what was previously a corridor underneath the bedrock, a small room (26) was installed, accessible from room 23 by a staircase with 8 steps (fig. 7). Of the rearranged rooms only a part of the floor was preserved in the north-east corner of the area (27), constructed of terracotta tiles

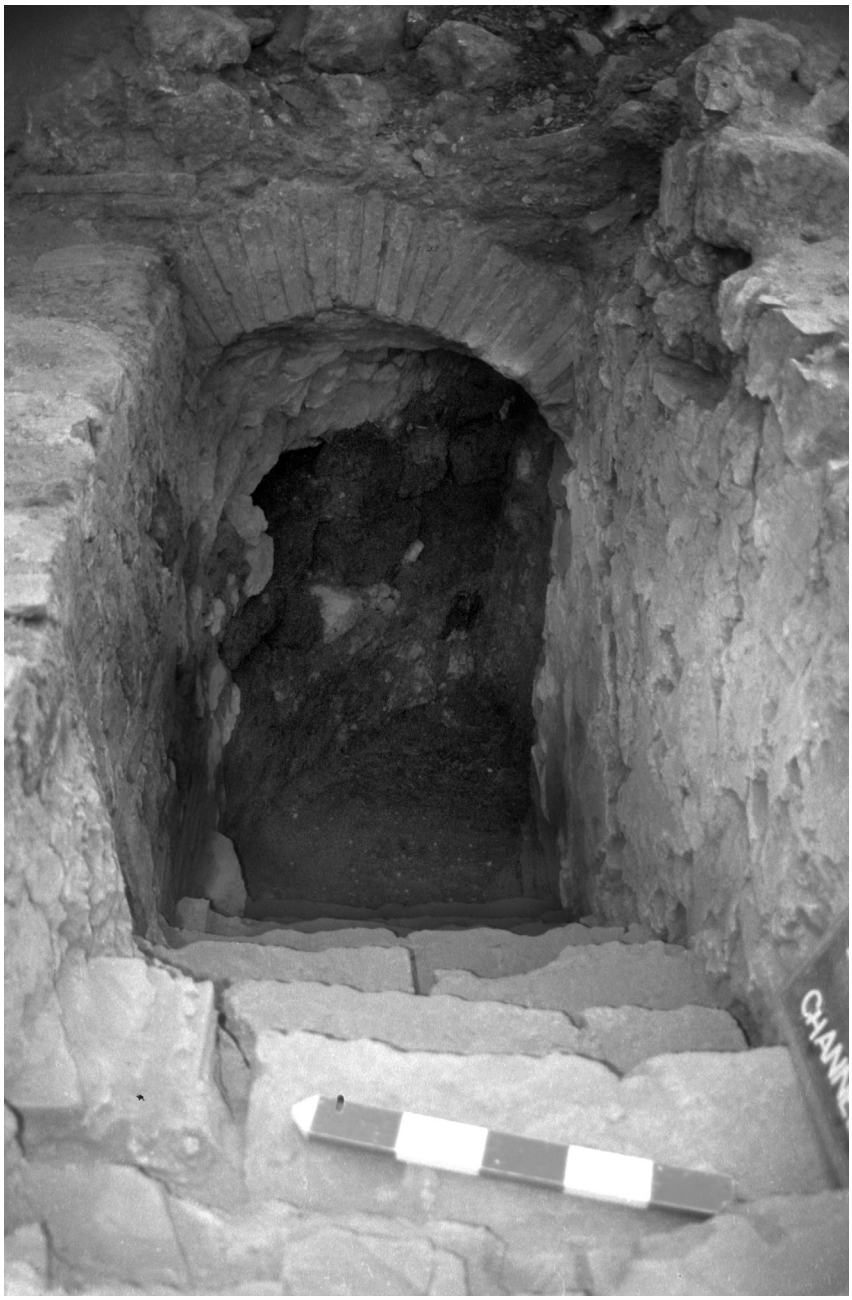

Fig. 7 The staircase towards room 26.

on top of a layer of mortar. No floor was found at this level in rooms 23 and 24; the floor that was there may have been removed at a later date. In room 27, south of the entrance, a settling tank was constructed connected by a channel to the former nymphaeum (19). This installation, used to collect water for cleaning the reception hall, suggests that the hall was used for dining during this period (building phase 5). In a later phase, however, the reception hall and the two rooms to the north lost their stucco facing and their marble floors, which indicates that the area served a different, less ostentatious function at that time (building phase 6).

Contexts

The contexts from this area could be attributed to different formation processes (fig. 8).

Layer 3 in rooms 23 and 27 was interpreted as a collapse/occupation layer. It contained material discarded during the abandonment of the house mixed with rubble from the collapse of the structures. In room 27 this layer was situated immediately on top of a tile floor. In room 23 the deposit was located above a compact layer, which contained earlier material, and was interpreted as fill dating to the rearrangement of the area at the beginning of the 6th c.

Room 24 contained three layers with a comparable composition. The ceramic material from these layers consisted of rather large sherds, few of which fitted together. Many tableware sherds carried traces of heavy usage. The breakage pattern and the general condition of the sherds, together with the thickness of the layers, suggest secondary refuse deposition. This interpretation is corroborated by the presence of large quantities of animal remains, representing kitchen and table refuse.

In the eastern part of the area, the deposit on the stairs formed a single unit with room 26 below the natural bedrock (26). However, during excavation it was noted that the majority of the sherds were retrieved from the stairs to the cellar, and could not be refitted. These sherds bore characteristics identical to those from layer 4 in room 24, and were found along with a large amount of animal bones and fish scales. From the somewhat secluded room 26, on the other hand, almost completely restorable vessels were retrieved. Apparently, the ceramics of room 26 originated from a 'de facto' deposit, while material on the stairs seems to be secondary refuse. This means that the vessels

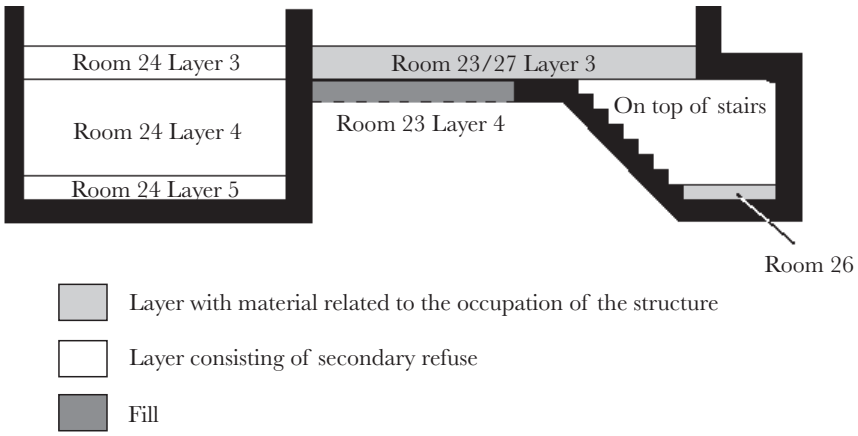

Fig. 8 Simplified sketch of the stratigraphy of the intermediate level.

identified were left in the cellar before refuse was thrown down the staircase, blocking access to room 26.

Material evidence

Ceramics

The scatter plot (fig. 4) indicates that the ceramic assemblages of this area can be attributed to different functional groups of pottery. The secondary refuse deposits from room 24 (R24_L3, R24_L4 and R24_L5) and from the staircase giving access to room 26 (on_stairs) are situated in the left part of the plot. They contain a high proportion of vessels for preparing, cooking and serving food. Sherds of locally produced cooking pots were particularly abundant. The assemblage from the floor of room 26 underneath the bedrock (R26) is distinguished by a much higher proportion of vessels for the storage of local agricultural products in comparison to the assemblages of the other deposits. Local amphora types predominate, which probably contained olive oil produced on the farms in the region.[42] Layer 3 of room 23/27 (R23_L3) contained an assemblage that is more difficult to interpret. The assemblage is situated in the centre of the plot between vessels for serving and vessels for consuming food. However, because the floor in room 23/27 was only

[42] Vanhaverbeke and Waelkens (2003) 241–84.

partially preserved, indicating post abandonment disturbance, these contexts must be interpreted cautiously.

Bone

The animal bone assemblages of these rooms can be subdivided into two groups (fig. 5). The first group comprises the deposits immediately on top of the floors in room 24 (R24_L5), room 23/27 (R23_L3) and the small room at the bottom of the steps (R26). The presence of a high proportion of intrusive rodents immediately on the floor surface of rooms 24 and 26 indicates that the accumulation of refuse in these rooms proceeded slowly. During this first period, waste was only occasionally dumped in the rooms, giving the animals the time to nest in the waste and scavenge the food remains. Later, the deposition of debris occurred more rapidly, as a result of which fewer rodent remains accumulated. The second group of animal bone assemblages is derived from the layers of secondary refuse themselves (R24_L4, and on_stairs). The animal bones within these deposits mainly represent table and food preparation refuse. Bones from chicken, goat/sheep and fish predominate. With regard to domestic fowl all skeletal elements are represented, including cranial elements and parts of the feet, which are generally interpreted as slaughtering refuse. The birds thus seem to have been brought in alive and slaughtered and prepared in the house itself. Slaughtering refuse from domestic mammals, on the other hand, is scarce. In the case of cattle, even skeletal elements corresponding to meat-bearing parts are very rare. This does not mean, however, that cattle were not consumed. The meat and bones of this large animal were probably sold separately, as indicated by a contemporaneous context at the Lower Agora in the city centre. The dump at the Lower Agora contained, almost exclusively, cattle bones with shaving marks, indicating the removal of the meat from the bone.[43] Among the fish bones from room 24 and the staircase, freshwater fish, such as carp, is best represented. A concentration of carp scales was found within the refuse deposit on top of the stairs. The scales indicate that fish, like domestic fowl, was cleaned and processed in the house itself. Besides Anatolian fish species, Nilotic species were also consumed, which must have arrived at the site in cured form (dried or smoked).

[43] Van Neer and De Cupere in Putzeys *et al.* (in press).

Plant Remains

The plant remains found in the rooms of the intermediate level are quite consistent across different contexts (fig. 6). In all cases, charred plant material represents kitchen-and table refuse. Plant material from these contexts can be classified as cereals, legumes or plants with edible fruits. Layer 3 of room 23/27 (R23_L3) and the layer on top of the stairs towards room 26 (on_stairs) contained cereals such as barley and wheat, legumes (lentil) and seeds from plants with edible fruits such as olive, hackberry, walnut and Italian stone pine. Layers 4 and 5 in room 24 (R24_L4) had a comparable assemblage and were studied together. In content, they were similar to layer 3 of room 23/27 and the layer on top of the stairs, but in addition to the aforementioned species, the cereals emmer and bread/macaroni wheat were present. Both layers from room 24 also contained more seeds from legumes and plants with edible fruits such as grape and almond. The charred evidence from layer 4, however, contained many wild plants, such as plantain, lamb's-quarter, black nightshade, henbane and sorrel, in addition to the cultivated plants present in the other contexts. The greater quantity of weedy plants in this layer of room 24 indicates that there was sufficient time for weeds to invade this dump and develop to fully grown, seed bearing plants, which in turn suggests that the space was no longer roofed and seldom entered and used.

Small Finds

The metal small finds retrieved from room 26 and the adjacent staircase primarily consist of multifunctional elements such as iron and copper alloy chain fragments, iron hooks and cotter pins. It is most likely that these finds are related to the initial use of room 26 as a storage cellar. Dump indicators, such as sheet and scrap metal and non-diagnostic metal fragments, were not found here. Among the metal finds from the floor deposit of room 23, multifunctional chain and hook elements were again most abundant, indicating the storage of material in this room. In addition, a limited number of personal ornaments (e.g., a broken hair pin and a fragment of an earring) and household implements (e.g., a copper alloy fragment of a vessel handle) were documented. It is striking that none of the latter finds were complete. The metal finds from room 24 are comparable to those of room 23. Again the assemblage contains either broken objects (e.g., a broken bracelet fragment and a hair pin piece) or sheet and scrap metal. Metal assemblages retrieved from the secondary refuse deposits often contain scrap metal, as may

be expected. Valuable and practical items are unlikely to be deliberately dumped, unless they are broken. One could consider scrap and sheet metal as economically valuable items, as they can be collected for recycling. In the case of Sagalassos, however, iron instruments were locally produced and good quality iron ore extraction sites were nearby. The systematic gathering of scrap iron to be recycled was probably was not carried out at Sagalassos, even in the Early Byzantine period.

A hoard of coins found lying on the third step of the staircase to room 26 deserves special mention. It contained 21 bronze folles: 12 dating to the reign of Justinian I (A.D. 527–565) and 9 to the reign of Justin II (A.D. 565–578). The coins were enclosed in a pouch, of which textile fragments were found. The hoard must have been either lost or hidden on the stairs sometime after A.D. 575.[44] It may indicate a period of distress, though there are many possible reasons for the non-recovery of a coin-hoard. Very few other coins were found in this area. From room 23 a coin of Theodosius (A.D. 392–395) and 4 undatable coins were retrieved, while room 24 contained some small coins that probably date to the second half of the 5th c. A.D.

Interpretation of the data

The assemblage of room 26 is unique. The context was interpreted as a 'de facto' deposit and its vessels were all largely restorable. This ceramic assemblage is clearly distinguished by a much higher proportion of vessels for the storage of agricultural products, as compared to the assemblages of the other deposits. Local amphora types predominate (no less than 8 specimens); these amphorae probably contained olive oil or wine produced on the farms in the region. Because of the presence of so many amphorae and the suitable location of the room, room 26 was interpreted as a storage cellar. This small space underneath the bedrock would have been cool and was a dead end, making it an ideal place to store goods. That the staircase leading to the small room was used for waste disposal indicates that room 26 fell out of use before the final abandonment of the house. The ceramic assemblage of the storage cellar might even be associated with the fifth building phase of the urban villa, in the first half of the 6th c. During this restoration,

[44] Scheers (in press).

the small rooms were deliberately connected with the reception room, where guests were received and entertained.

In the second half of the 6th c., however, the reception area must have lost its display function. During the subsequent period, people used room 24 and the stairs to room 26 for the disposal of waste. In the first phase of such disposal, waste seems to have been thrown in irregularly, giving rodents the opportunity to scavenge the food remains. Later, these sites were used for the systematic disposal of refuse. Because the small rooms are situated at the very back of the building, the surrounding structures must have been still, or once again, inhabited. People would not have bothered to throw their waste this far into the house when other rooms, closer to the entrance, would have served equally well. The waste material recovered was related to food processing. Both refuse deposits had a very high proportion of cooking vessels. They contained many bones, especially from chicken, goat/sheep and freshwater fish, as well as concentrations of fish scales and a large amount of cereals and seeds of legumes or woody plants with edible fruits. No direct evidence for cooking activity, however, was found within the rooms themselves. The former reception room might have served as a food preparation area, as the room could have provided adequate space for cooking and eating for the people still living in the structures.

The floor deposit of rooms 23 and 27 was characterised by tableware, indicating food consumption. As stated earlier, the material should be regarded cautiously, because the floor was not completely preserved in this area. The palaeo-botanical evidence recovered from primary deposits mostly contained seeds, which can be interpreted as kitchen and table refuse.

Discussion

What does a fully integrated approach to the archaeological data reveal about the living conditions in the urban villa at Sagalassos in Late Antiquity?

The villa, like many public monuments in the city, was largely restored at the beginning of the 6th c. On the upper floor of the house, damage to the south-eastern pillar of the main reception hall of the villa was repaired (room 22). The fact that the effort was made to repair this pillar, which supported the vault covering the room, indicates that the inhabitants still regarded a large room for receiving guests as necessary.

At the same time, the southern wall of the reception room was completely rebuilt, and the hall was connected to the 4 small rooms to the south of it. As previously mentioned, in one of these rooms (23/27) a settling basin was installed for collecting cleaning water. This indicates that room 22 might have been used for dining as well as for receiving guests during this period. The amphorae found in a small cellar (room 26) south of the reception hall might be related to this period in the occupation of the house. Because the inhabitants tried to restore the house in accordance with its former grandeur, they must still have been rather wealthy.

In the course of the 6th c., however, the villa was of a more 'rural' character. The mansion changed from a semi-official building into several separate units in which the activities of every day life were most important. In addition, during this period the villa contained clear evidence of farming activities. In the lower part of the villa, the area next to courtyard 13 was subdivided into smaller rooms, while the eastern rooms of the private bath complex (rooms 15 and 16) lost their hypocaustum floors and may have fulfilled a different function. Several pieces of evidence, such as the floor removal and installation of fodder troughs, suggest that courtyard 25 was used as a stable and for the storage of various products, even though this space was essential for circulation through the house and previously had a more or less luxurious character, as indicated by the frescoes in the surrounding arcade. The presence of animals is further attested by the palaeo-botanic assemblage, which included seeds from plants normally used as fodder. In addition, seeds and chaff remains suggest that the adjoining room 28 was used for the storage of dung cakes. The archaeozoological evidence suggests the presence of an owl's nest in the same room, indicating a lack of simultaneous human occupation in this area. In addition to the (temporary) usage of the court as a stable, it also served for storing local or imported agricultural products and household utensils. In the upper part of the mansion, the reception hall (22) and the two rooms to the north (31 and 44) were stripped of their wall and floor coverings. In addition, waste was discarded in the rooms to the south of the former main reception hall. The refuse deposited in these rooms was related to food processing and consumption. This refuse contained an abundance of cooking vessels, together with a concentration of animal bones, fish scales and plant seeds interpreted as subsistence remains. The presence in the villa of imported products such as Late Roman 1 and Late Roman 4 amphorae and Nile fish from Egypt may more directly reflect contact

with other regions of the Early Byzantine empire than the high status of the inhabitants. The importation of goods was a normal feature of late antique exchange patterns. As one example of such exchange, recent research indicates that Nile fish were commonly traded in the eastern part of the Mediterranean,[45] and subsequently consumed by people of lesser status.[46] The imported amphorae recovered at the villa comprise standard types for the Early Byzantine period. These types are found at a wide range of sites in the East Mediterranean, and probably contained products of mediocre quality. The question remains, however, whether the relative importance of traded goods increased or decreased in the urban villa in comparison to the previous periods. As we did not encounter clearly defined assemblages dating to earlier occupation phases of the villa, we must rely on evidence from contexts elsewhere in the city to make such comparisons.

Overall, evidence seems to indicate a certain decline in the living standard of the inhabitants of the villa. Apparently, space was utilised differently during the last period in the occupation of the house, in response to the changing needs and means of the inhabitants. It is possible that at some point during the second half of the 6th c., the original landlord and his family abandoned the building, and the structures were then occupied by people who made more pragmatic use of space within the villa to cook, eat and dump their waste. Signs of a much more 'rural' society from the second half of the 6th c. onward have been uncovered from almost every excavation area at Sagalassos during recent campaigns. This decline of 'urban' character might be related to general economic decline in the Early Byzantine empire, caused in part by the plague of A.D. 541/2. The housing unit was finally abandoned shortly before an earthquake completely destroyed the site sometime in the second half of the 7th c. A.D.

Conclusion

Examining the material evidence of the urban villa at Sagalassos shows that integrating data from multiple sub-disciplines is valuable in the reconstruction of patterns of daily life. To attain this integration, a

[45] Van Neer *et al.* (2004).
[46] Van Neer and Ervynck (2004) 206–207.

procedure consisting of three steps was used: the architecture of the space was examined, taphonomic processes that played a role in the formation of the assemblages were identified and patterns of the presence and absence of specific functional groups within the archaeological material were identified and analysed. In this case study, patterns related to substantial changes in the occupation of the site were identified, including an apparent decline in the status of the inhabitants, and its eventual abandonment. This made the full integration of all available data highly desirable, as most of the material linked to the occupation of the site had been either removed or disturbed. The employment of fully integrated archaeological research at other domestic sites from Late Antiquity should make it possible to evaluate better the information recovered from archaeological data.

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HOUSEHOLDS AT PELLA, JORDAN: DOMESTIC DESTRUCTION DEPOSITS OF THE MID-8TH C.

Alan Walmsley

Abstract

The excavation of 6 courtyard houses at Pella in the Jordan Valley, destroyed in a massive earthquake in the mid-8th c. A.D., provides an exceptional opportunity to study a wide range of objects from daily life within a secure archaeological context. The recovery of detailed information about the layout of buildings and the contextual origin of the many domestic objects recovered permit a full reconstruction of life in the household, especially the use of space. Generally, the upstairs area served as the primary living quarters, whereas the ground floor was used to house valuable domestic animals and for light workshop activities.

Introduction

With only a few notable exceptions, Middle Eastern archaeology has taken little interest in exploring domestic areas of archaeological sites. While not a failing unique to this region, most projects in the Middle East have focused almost exclusively on major public monuments, and then religious edifices rather than secular ones. For instance a major site such as Gerasa (Jarash) in Jordan has been excavated on and off for over 75 years, with temples, churches, theatres, streets and other monuments being merrily exposed, but hardly any domestic quarters of any period. The reason for a prolonged disinterest in the domestic profile of a site has in the past had much to do with the aims of early missions: to reveal the past grandeur of a 'lost' civilization or to illuminate early Christianity, and to demonstrate this graphically through architecture and art history. Accordingly, even where buildings were excavated (perhaps 'cleared' is a better term) little interest was taken in properly documenting and publishing the later occupational history of a monument, with the continued use of a building often being dismissed as 'squatter occupation' and therefore irrelevant. In this way the urban

L. Lavan, E. Swift, and T. Putzeys (edd.) *Objects in Context, Objects in Use* (Late Antique Archaeology 5 – 2007) (Leiden 2007), pp. 239–272

history of many sites—ancient, classical and post-classical—was simply discarded, along with the spoil from the excavations.

Not until the later 20th c. did archaeological projects begin to look beyond simply documenting the constructional history of urban monumentality. At Apamea (Afamia) and Déhès (Dayhis), for instance, attention turned to issues of post-classical urban continuity, including the detailed investigation of developments in the domestic settlement of the site.[1] Similarly and with characteristic foresight, B. Hennessy and A. McNicoll decided from the outset that the excavations at Pella in Jordan should open up a reasonable area of the last major period of settlement on the main archaeological *tall*, which they assumed to be Roman with significant post-Roman occupation.[2] This was to be done by undertaking an open-area excavation based on a surveyed 10 m site grid (the Wheeler box-grid method), subsequently opened out by removal of the intervening baulks. Their initiative was quickly rewarded. Between 1979 and 1982, 6 house units were excavated at the eastern end of the main mound, each buried in a thick destruction deposit from an earthquake dating to the mid-8th c. A.D. (fig. 1, Area IV). These units were the result of earlier, mid-7th c. modifications to pre-Islamic houses built in the time of Justinian the Great (A.D. 527–65). At the same time R. Smith, director of the Wooster team, was also recovering 6th to mid-8th c. material in two areas: other houses near the western edge of the main *tall* and in the cathedral church of Pella, which is located to the south-east of the mound in Pella's central valley (fig. 1, Areas VIII and IX respectively). This collaborative work—ours on the *tall* and Smith's also on the *tall* and at the church and related structures—produced an exciting intellectual climate in which the late

[1] *Apamea*: see especially Balty (1984); *Déhès*: Sodini *et al.* (1980). While Déhès is better viewed as a village, work at such rural sites was part of a burgeoning interest in domestic settlement in the 1970s. See also, more recently, the excellent (but tantalisingly brief) papers in Castel, Maqdissi and Villeneuve (1997) resulting from a colloquium held in Damascus during 1992.

[2] Hennessy and McNicoll were co-directors of the Sydney team of the Joint University of Sydney and the College of Wooster Excavations at Pella, which began in 1979. After 1985, Sydney continued the work at Pella alone, and with the early death of McNicoll each of the major periods was allocated to a co-director, the author assuming responsibility for Sydney's Islamic material excavated up until 1993. For the major reports on Pella to date, see: McNicoll *et al.* (1982); McNicoll *et al.* (1992); Sheedy, Carson and Walmsley (2001); Smith (1973); Smith and Day (1989).

antique to Early Islamic settlement history of Pella was revealed and debated.[3]

In this paper, an analysis of the discoveries from the Sydney work at the eastern end of the main mound is presented, focusing on the urban development of the site between the 7th and 8th c. and the organisation of the housing at the time of the dramatic earthquake of the mid-8th c. Both the existing plan of the houses and the objects found in their rooms as preserved are studied in an attempt to reconstruct domestic activities in a provincial town in the late antique to Early Islamic transitional period. The material will be presented in 4 related sections: the geographical and historical setting of Pella; the site and its excavation; the mid-8th c. discoveries and a comparison to similar discoveries at adjacent sites; and finally the arrangement of households on the *tall* in the mid-8th c. In many ways the Pella material remains exceptional in the archaeology of 7th and 8th c. Jordan and Palestine, for the house plans and room contents can be combined to reconstruct in graphic detail, domestic life in the late antique–Early Islamic transitional period.

Geographical and Historical Setting of Pella

Pella is located on the lower eastern scarp of the Jordan valley at the southern end of an extended plateau, the orientation of which is north-south in line with the valley floor. The site is some 30 km south of Lake Tiberias (fig. 1, insert), and at around 30 m below sea level overlooks the expanse of the Jordan Valley below, the floor of which at this point is 120 mbsl. From Pella, routes crossed westwards to the Mediterranean Sea via Scythopolis (Baysan) and the Esdraelon Valley (Marj ibn Amir), south-eastwards to Gerasa and Philadelphia (Amman), and north-eastwards to Arbela (Irbid), Edrei (Dara'a) and Bostra (Busra). In various ways, and at different times in its long history, Pella functioned as a 'gateway community' by providing lodging, food and other facilities for travellers on the long haul out of the Jordan valley and into the hills and mountains to the east, but this service role meant Pella was more

[3] The author and Smith were eventually to disagree on interpreting this material in many details, which is—often—the nature of archaeology. Nevertheless, Smith is to be applauded for his detailed and prompt publications on his work at Pella.

dependent on the vitality of neighbouring centres than many other places in the southern Levant. The north-south routes along the Jordan Valley, while not passing through Pella, were easily dominated due to the spectacular breadth of vision up and down the valley, and almost to the Mediterranean along the Esdraelon, from Tall Husn, located south of the central valley (fig. 1), and the hills immediately to Pella's east. This strategic dominance was particularly important during the dynastic disturbances that characterised the overthrow of Maurice Tiberius by Phocas (A.D. 602) and the resultant claims to the emperorship by the Heraclii of North Africa (A.D. 608–10).

The advantages offered by the physical geography of Pella were exceptional. Until modern pumping, the central valley of Pella flowed with water year-round, originating in springs that are, in the Jordan valley below Lake Tiberias, second only in strength to Ayn Sultan at Jericho. Around the site is a varied environmental zone. Immediately to the north lie good agricultural fields on the plateau (Tabaqat Fahl), a slumped geological block overlaid with rich *terra rosa* soils. Below, to the west, is the floor of the Jordan Valley, well supplied with water and bathed in a tropical atmosphere conducive to agriculture. To the east, in the hills, a cooler climate prevails where olive, grape and other fruiting crops thrive and wood was to be found. In all areas pastoral activities can also be supported, with the valley floor offering the first spring grazing after the sparse months of autumn and winter. Given this wealth of natural resources, archaeological research at and around Pella has revealed a history extending back "half a million years".[4]

Well-placed and resource-rich, Pella did have its down-side: it sits astride a main geological fault line—part of the Dead Sea transform—the crushed and twisted ruptures from which can be observed in the exposed northern face of Tall al-Husn. In general terms, the Jordan Valley is the result of two shifting plates: the NNE moving Arabian plate and the SSW moving Sinai-African plate, the main fault line of which passes along the eastern shore of Lake Tiberias, through Pella and southwards to Jericho and the western shore of the Dead Sea. The resultant slump in the earth, the Jordan Rift Valley, constitutes the lowest geological basin on earth, at over 400 mbsl at the Dead Sea.[5]

[4] Macumber (2001).
[5] Marco *et al.* (2003), with further references.

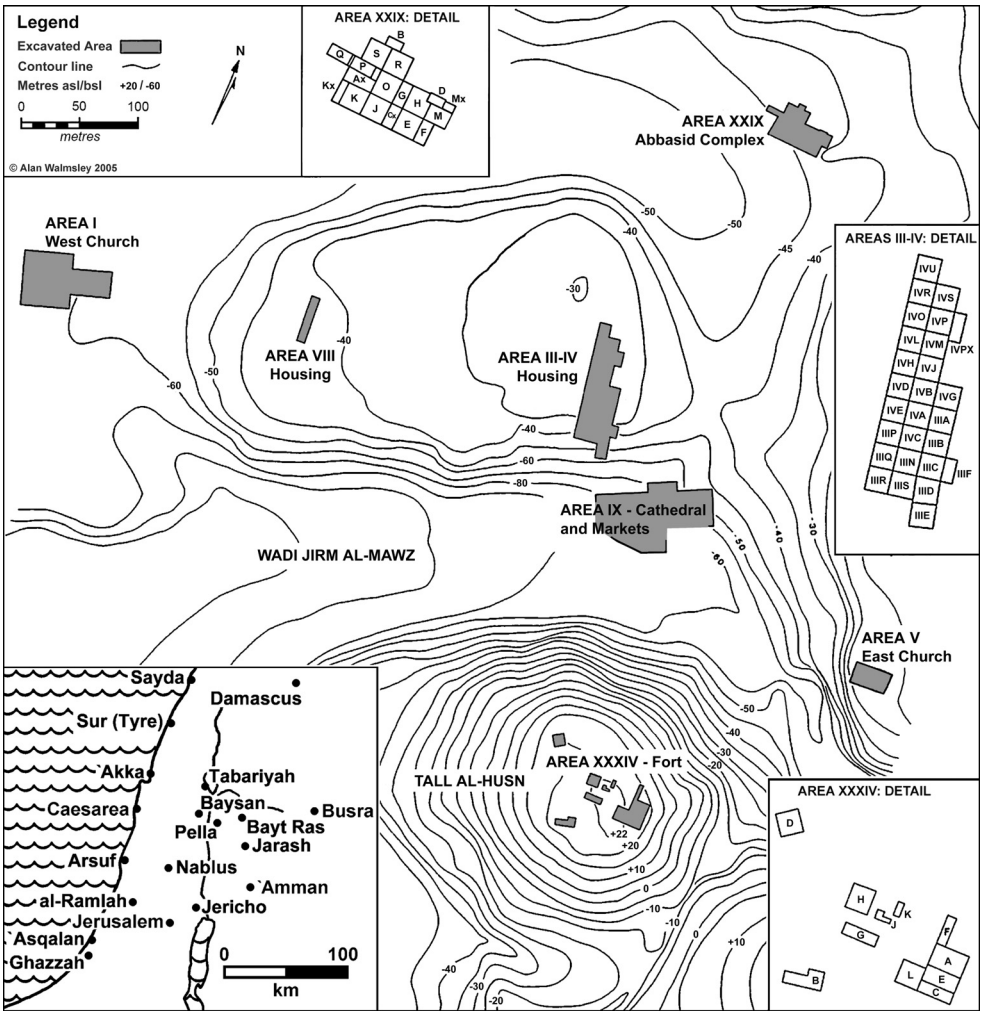

Fig. 1 Map of archaeological areas at Pella (Pella Project, modified Walmsley).

Pella's geographical position ensured its historical significance, but in this paper we must confine ourselves to the relevant period, *ca.* A.D. 600–750, and briefly so. In Late Antiquity it was a bishopric in *Palaestina Secunda*, and seemingly attained some military importance as well, for in A.D. 635 one of the earliest battles between Muslim and Byzantine forces occurred nearby, the Battle of Fihl (Fihl being the ancient Semitic name for Pella that was reinstated in Early Islamic times). This resounding success for the Muslims over the Byzantines considerably aided their military objectives, particularly the securing of Damascus, which was finally achieved in the following year after the Battle of Yarmuk (A.D. 636). The strategy at Pella was to sever the link between Damascus and Jerusalem, probably the two most important centres in the southern Levant (Bilad al-Sham) in the early 7th c., as the mint of Heraclius at Jerusalem, datable to A.D. 613/14, would suggest. Very possibly some forces, perhaps cavalry, were stationed at Pella in order to monitor traffic on the Jerusalem to Damascus route, as the excavation of a fortlet on the top of the strategic mound of Tall al-Husn would confirm.[6] In Early Islamic times, Pella came to be included in the *Jund al-Urdunn* (military province of the Jordan), under the jurisdiction of Tiberias. Administratively, it seems to have been joined with Scythopolis, where there was a large administrative quarter, and Gerasa, where recent excavations have uncovered a large congregational mosque and associated public structures.[7] However, unlike Scythopolis and Gerasa, Pella apparently did not mint base coinage (at least no issues have been definitively identified with Pella or Fihl as a mint-name to date),[8] perhaps suggesting the absence of any permanent Muslim administration at the site.

[6] Watson and Tidmarsh (1996), with references. Also, see further below.

[7] *Scythopolis quarter*: Fitzgerald (1931); Walmsley (2004); *Gerasa/Jarash mosque*: Damgaard and Blanke (2004); Walmsley (2003a); Walmsley (2003b); Walmsley and Damgaard (2005). A similar arrangement is known for north al-Urdunn, where Gadara (Jadar, now Umm Qays), Capitolias (Bayt Ras) and Abila (Abil) were co-joined administratively; see Peeters (1939); Walmsley (2004).

[8] Album and Goodwin (2002) 82, 89; Amitai-Preiss, Berman and Qedar (1994–99); see also Oddy (2004), where a third mint at Abila is tentatively but credibly identified.

The Site and Relevant Excavated Areas

Pella in Late Antiquity was located in and around a centrally placed, water rich valley today called *Wadi Jirm al-Mauz* (fig. 1). In Roman times, if the images on the 2nd c. A.D. city coinage from Pella can be believed, a colonnaded street and other public monuments graced the valley, but by the late 6th c. thick layers of water-borne wash deposits seem to have inundated the lower town, a phenomenon also known at Scythopolis, Tiberias, Gerasa and Philadelphia.[9] Coincidentally, as in other late antique towns, civic life increasingly focussed on Pella's cathedral church, built on an elevated platform opportunely located at the upper eastern end of the central valley at the south-east corner of the *tall* (fig. 1, Area IX). A paved street of early 7th c. date led northwards from in front of the church up the slope to the top of the *tall*, thereby linking church with town. Pella also had two other churches in Late Antiquity, the East Church, midway up the hills to Pella's east (fig. 1, Area V), and the West Church, next to a cemetery at the western entrance to the town (fig. 1, Area I).

To the north of the valley stood the *tall*, the top of which was levelled out in Late Antiquity to make space for a gridded domestic quarter. Two areas of housing were investigated: Area VIII by the Wooster College team and Area IV by the Sydney team, where the construction of the houses was dated to the second quarter of the 6th c. by the excavator P. Watson (fig. 1).[10] Housing spread down the *tall* side into the valley on purpose-built terraces, as noted in both excavations. Exactly the same remodelling of the urban landscape occurred at Scythopolis, where the archaeological mound was flattened and terraced in preparation for building in Late Antiquity, including the construction of a grand centralised church.[11] The predominantly natural hill located south of Pella's central valley stands at a much higher level than the flattened top of the *tall*. Today this imposing rise is known as Tall al-Husn—the 'mound of the fortress'—an ongoing reflection of its natural defensive qualities appreciated since the Early Bronze Age. On the summit of this mound in Late Antiquity stood a military barracks, the size and

[9] *Pella*: Smith and Day (1989) esp. 7–8; *Gerasa*: Ball *et al.* (1986) 357.

[10] Dating was determined by ceramics and coins; see McNicoll *et al.* (1982) 110–11, 120–21, 123–26, 130–39; McNicoll *et al.* (1992) 163–81, 183–86.

[11] Fitzgerald (1931).

function of which had been much expanded in the latter part of the 6th c.[12]

In all of these areas where excavations have taken place, ample evidence for two earthquakes has been uncovered, the first dating to A.D. 659/60 and the second, much larger one, to A.D. 749. The first earthquake is particularly evident on Tall al-Husn, where the barracks was shattered by the force of the tremor and never rebuilt, and on the main mound, where houses required substantial rebuilding and remodelling after the quake. The churches also seem to have been adversely affected by this seismic event, although there is argument about the extent to which they were still functioning in the mid-7th c.[13] More impressive as an archaeological episode, and certainly more destructive, was the massive earthquake of A.D. 749. Evidence for this tragedy—and the extent of the damage at Pella as well as neighbouring sites (below) has revealed the truly awful consequences of this earthquake—can be seen in the final destruction of the churches and the utter obliteration of the domestic quarter on the main mound. Spectacularly preserved in the domestic destruction deposits of Area IV is an intense 'snapshot' of daily life on the day the earthquake struck, known from historical sources as 18 January A.D. 749.[14] The enormous range of material uncovered—such as ceramics, glass, metals, and human and animal victims—can be attributed to the fact that the earthquake struck in mid-winter, a time of year when many activities, and people, were confined indoors.

When the town of Pella came to be rebuilt after the earthquake, it can be assumed that the unstable condition of the ground on the main mound and in the central valley were such that a new location, just to the north-east of the *tall*, was necessary, and here were erected, from the stone blocks of the destroyed town, two large gated courtyard enclosures

[12] Report in Watson and Tidmarsh (1996).

[13] *Cathedral church*: Smith and Day (1989) 90–94; *West Church*: Smith (1973) 164–67. In the reports on both of these churches, Smith argues for an intermediary earthquake in A.D. 717, but at Pella like elsewhere the evidence for this event is most inconclusive. Quite possibly the structural damage attributed by Smith to A.D. 717 was the result of the irrefutable earthquake of 749, while the post-A.D. 717 robbing and stripping of the churches occurred after A.D. 749. If correct, this would mean both churches were still in use until destroyed in the A.D. 749 cataclysm.

[14] The debate over the exact year (A.D. 747, 748 or 749), was decided by the discovery of a coin dated to 131 A.H. (31 August A.D. 748–19 August A.D. 749) in the earthquake destruction level at Scythopolis, for which see Karcz and El'Ad (1992).

and other structures.[15] Looking very much like caravanserais in their original form, with an open central courtyard flanked by porticos and rooms (some clearly designed for storage), these complexes were added to over time and came to be multi-purpose in function, from domestic to industrial and perhaps administrative. A special feature of the eastern complex was the construction of furnaces and the manufacture of blown and pinched glass beakers and other glass products.[16]

Evidence from the A.D. 749 Earthquake

As has already been noted, graphic archaeological evidence for the severity of the A.D. 749 earthquake has been found in different locations at Pella, notably the church complex in the central valley (Area IX), the West and East churches (Areas I and V), and the domestic quarters on the main mounds (Areas IV and VIII). Since the Pella discoveries, similar destruction deposits have been found at other urban sites along the Dead Sea transform, with spectacular evidence for the powerful impact of the earthquake being uncovered at Scythopolis just across the Jordan River from Pella, Gadara (Umm Qays) overlooking Lake Tiberias in north Jordan, and Tiberias itself.[17]

The Pella evidence when revealed in the early 1980s presented a conclusive picture of a simultaneous urban destruction in A.D. 749. First proposed by Smith for the West Church (Area I) in the mid 1970s,[18] new work at the central valley church (Area IX) and on the main mound produced much more definitive and illustrative information on urban life at Pella at the time of the mid-8th c. earthquake.

The cathedral church and related structures excavated by Smith present an intriguing case of urban change after the Islamic expansion. Significant modifications occurred north of the church building, where a paved porticoed court, which coincided with the construction of the

[15] Walmsley (1991).

[16] On the glass from Umayyad and Abbasid Pella, see O'Hea (1992). O'Hea's final report is currently in press.

[17] *Scythopolis*: Tsafrir and Foerster (1994); Tsafrir and Foerster (1997); Karcz and El'Ad (1992); *Tiberias*: Marco *et al.* (2003). At Jericho, the fault caused severe damage of 'Hisham's Palace' (Khirbat al-Mafjar), although not a total destruction as subsequent occupation with the complex testifies; see Hamilton (1959); Hamilton (1988); and, importantly, the redating of the ceramics in Whitcomb (1988).

[18] Smith (1973) 165–66.

church, was modified by the construction of two-storeyed rooms faced with porches and galleries. Standing some 8.5 m high, this structure was clearly of major importance in the life of the town as it flanked the main entrance into the church, and was probably commercial in purpose (fig. 2).[19] At least, this would seem to have been its final function on the day the A.D. 749 earthquake struck Pella with all of its intensity. Caught within the collapsing structure were two people and several animals, including 7 camels (one in advanced pregnancy), a horse and foal, an ass, and 4 cows. The age and condition of the camels—juvenile, young adult or in calf—suggests they were being sheltered on a particularly harsh winter's day.[20]

With these fatalities of nature were recovered several Umayyad coins, including a *dinar* (94 A.H./A.D. 712/13) and 14 *dirhams* (between 81 A.H./A.D. 700/701 and 112 A.H./A.D. 730/31), numerous ceramic vessels and lamps, iron implements including a dagger, a bronze jug and three glass bottles.[21] A mass of iron tools was found in a smith's workshop in the south-west corner of the building, including a pick head, shovel, shears and sledgehammer head. What was happening in the church at this time is disputed (see note 13). In the court preceding the church (atrium), three iron torch holders were found along with pottery vessels, suggesting a not insignificant level of activity. Within the church building, in the south aisle, the skeletons of two humans were found, but, apart from a few ceramic vessels (including a group of arcane pierced pottery cones), little else, except architectural debris from the collapsed church. Subsequently, from a level above the collapse that contained later Abbasid-Fatimid material, stone was robbed from the destroyed building.[22] This pattern of an A.D. 749 collapse and

[19] This interpretation differs in details from Smith, who dates the conversion to the early 6th c. and proposes that the purpose of the building was ecclesiastical, suggesting it was intended as a 'hospice' or served an 'administrative' function. This author has, in addition, emphasised a commercial purpose for this construction, proposing that it served as the early Islamic market and caravanserai of Pella. All three functions—accommodation, administrative and commercial—could have been (and probably were) intended. Equally likely, Pella's clergy-administrators were the persons responsible for this enhancement to the urban environment, acting as the local representatives within the province of al-Urdunn.

[20] On camels—the 'second pillar' of Bedouin life—see the definitive work by Jabbur (1995) 191–237.

[21] Smith and Day (1989) 67–71.

[22] Smith and Day (1989) 50–52, note especially fig. 13 and the accompanying explanation.

Fig. 2 View of the market and church in Area IX (Walmsley).

subsequent robbing, matches that recognised in Area IV, and further suggests that the looting of the church fixtures did not occur until after the earthquake of A.D. 749.

On the main mound, due to the more complete nature of the deposits, the archaeological sequence is less obscured and the finds more representative, for it was houses—with all their human and material contents—that were lost to the unexpected ferocity of the A.D. 749 quake. In Area IV (figs. 1, 3–4), excavations between 1979 and 1983 revealed 6 house units destroyed at the time of the earthquake, but these originated in a quite different urban plan first laid out in the second quarter of the 6th c. As seen in other towns of the Levant, the age of Justinian was accompanied by many instances of urban renewal as local elites were caught up in the double stimulus of Justinian's imperial church construction in Jerusalem (the *Nea*) and the broader traditionalising (pseudo-)Roman policies of his age.[23] Money, some emanating from Constantinople but much generated by local elites, was invested in urban infrastructure, and at Pella this was expressed in the complete remodelling and rebuilding of living quarters on the main mound.[24] The 6th c. arrangement consisted of a gridded layout based on gravelled streets, 3.6 to 4.4 m wide, lined (in part) with shops, but without columned porticos. Hence the arrangement was homogeneous, but not monumental. The housing was built contiguously terrace-style, at least two storeys high and using (at least on the lower levels) stone as the primary material. Although repeatedly modified subsequently, the essential layout remained the same until the A.D. 659/60 earthquake damaged sections of the terrace houses and compelled a reconsideration of living arrangements.

In Area IV, the physical changes instituted in domestic arrangements following the mid-7th c. earthquake were inventive, and socially significant. The former linear 'terrace-type' houses were replaced by

[23] Walmsley (1996), with references. Such policies created an atmosphere and impetus for improvement, but the participants were predominately local. Nonetheless, caution must be exercised not to automatically attribute chronologically undefined urban developments to the first half of the 6th c., as the initial misdating of the market street at Scythopolis persuasively demonstrates. Initially dated to 515/16, the subsequent discovery of two mosaic inscriptions required a redating of the shops to the reign of the Umayyad caliph Hisham b. ʿAbd al-Malik (r. A.D. 724–43), probably in A.D. 737/38 and more than two centuries later than first imagined. See the retraction in Tsafrir and Foerster (1997) 123, and for the inscriptions Khamis (2001).

[24] Detailed in Watson (1992).

independent, self-contained domestic units, still double-storeyed, centred on one or more sizable courtyards, either paved or earth-surfaced. In fact, this change had been predicted in structural alterations introduced into a terrace house in the late 6th c., where rooms had been demolished in the middle of a unit to create a small internal courtyard, but the extent of the change was much greater after A.D. 660, for it also involved the creation of largely independent houses with only minimal physical connections with adjacent properties.

Six courtyard houses, each completely destroyed in the A.D. 749 earthquake, were excavated in Area IV (figs. 3–4). All were probably two-storeyed, perhaps three in some instances or at least with roof-top access (possibly House G), with well-built double-faced stone walls over a metre thick on the ground floor and an upper floor of unbaked yellow-clay bricks, the fallen remains of which filled the space of the ground floor rooms. In some cases upper floors were paved with plain mosaic over a pebble and mortar base, the walls plastered and painted (red, yellow, cream and fragments of text in black), and fitted out with fixtures in stone, often reused marble (some of which clearly came from a church). The absence of ceramic roof tiles in the collapse level, but the presence of carbonised wood beams, indicates roofs were sloping mud-and-reed constructions. Usually, the upper floors could be reached through the courtyards by way of stone-built staircases, indicating that the courtyards were private rather than public space in the town. In this way, the courtyard houses resembled the domestic units of the *badiyah* (Syro-Jordanian steppe), such as those of Umm al-Jimal.[25]

Houses A–C are located at the south-eastern corner of the *tall* (figs. 3–4), and generally represent a rebuilding of the terrace houses that prior to A.D. 659/60 faced the southern perimeter of a gravelled street, 4.4 m in width. Shops were not a feature of this street façade, unlike on the north side. Following the earthquake, a long wall, running north-south, was constructed to delineate the west limit of Houses A and B. This wall continued northwards over the now defunct street, blocking it, and then turned westwards along the northern edge of the former street, in line with the truncated façade of the shops that once lined this part of the street. A large open courtyard was thereby created, seemingly approached from the west (unexcavated), and onto which opened a narrow doorway from the ground floor of House A. Small cooking

[25] For this site and its domestic arrangements, see Knauf (1984); de Vries (1998).

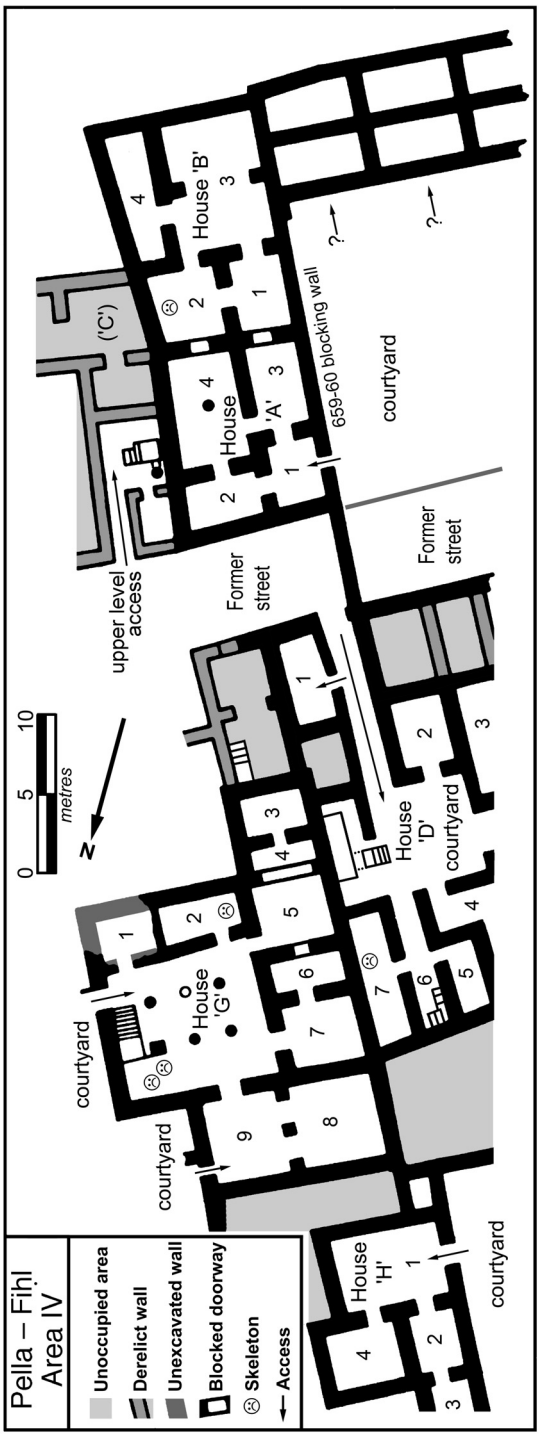

Fig. 3 General plan of the Umayyad housing in Area IV (Walmsley).

Fig. 4 View of the Pella Houses A–B in Area IV, after excavation. Part of the section shown in figure 5 remains on the left; note the fallen column (Walmsley).

ovens (*tabun*) flanked the doorway. Other doorways may have opened out onto the courtyard from House B, including from a bank of rooms two deep (for storage?) along the south edge of the courtyard, but as only wall foundations remain in this area any such openings were not preserved.[26] That there must have been doorways is suggested both by the presence of a solitary earthquake victim in House B room 2, and the fact that the downstairs rooms of both houses were equipped with feed bins for the stabling of animals.

Internal ground-floor doorways once allowed passage between House A and B, perhaps before A.D. 659/60. These had been blocked with a solid wall-like filling with stone feed bins as part of this operation, indicating that this partitioning was intended to be permanent. In House A, as part of this modification, a subdividing wall, bonded to the blocking between room 3 of House A and room 1 of House B, was built in room 4. Subsequently, this wall was demolished and a support

[26] These rooms, two deep, may have been shops. The absence of a staircase to the upper floor from the large court west of Houses A and B may suggest that public access to this court was possible.

for the upper floor was inserted in the middle of the room in the form of a column (fig. 4). The upper floor of House A was not entered from the courtyard, but from the other (east) side of the building via a passageway, small courtyard and staircase. No easy access was possible from this area to the large courtyard to the west, due to the blocking of the former street by the north-south wall described earlier. Hence the first-floor living quarters of House A were unconnected with the lower storey activities of House A, thereby presenting an example of 'apartment' living in 8th c. Pella. The status of House C in the last decades before the mid-8th c. destruction is unclear, but the small area excavated appears to have been a dump rather than used for living, and the whole unit might have been abandoned by this time.[27]

The disposition of finds in the layered collapse of Houses A and B confirms human occupation of the buildings was primarily confined to the upper rooms (figs. 5–7). A range of domestic items were found sandwiched between sloping collapse levels of the destroyed house, some preserved whole and others shattered by the fall. These included ceramic vessels and lamps, metal objects such as containers and pins, worked bone, shell and stone, especially small basalt grinders and steatite cooking bowls, and glass vessels and beads (fig. 6). The geographical origins of these diverse finds were unexpected: the ceramics were nearly all regional products, especially from Gerasa and Scythopolis (fig. 6, number 1; fig. 7), but the metals and steatite originated in Egypt and north-western Arabia respectively (fig. 6, numbers 1, 3). The excavation at Aylah on the Red Sea has turned up numerous steatite vessels, including a multi-spouted lamp, as would befit a seaport to the Hijaz and Arabia. It is not possible to be sure of the exact layout of the upper floors of Houses A and B, but very likely it reflected the wall plan of the ground level, as the one-metre plus stone-built walls were designed to carry the considerable weight of an upper storey and roof.

North of the former street, a rather more complicated rearrangement of housing occurred after the mid-7th c. earthquake. East of the blocking wall of Houses A and B, a shop that once opened out onto the former street was converted into a laneway, and the street-side shop reduced in size by the construction of a thin wall over the paved floor (fig. 2, room 1 House D). The function of this reduced room is unclear.

[27] The *tall* falls away at this point due to erosion, so the evidence is scarce.

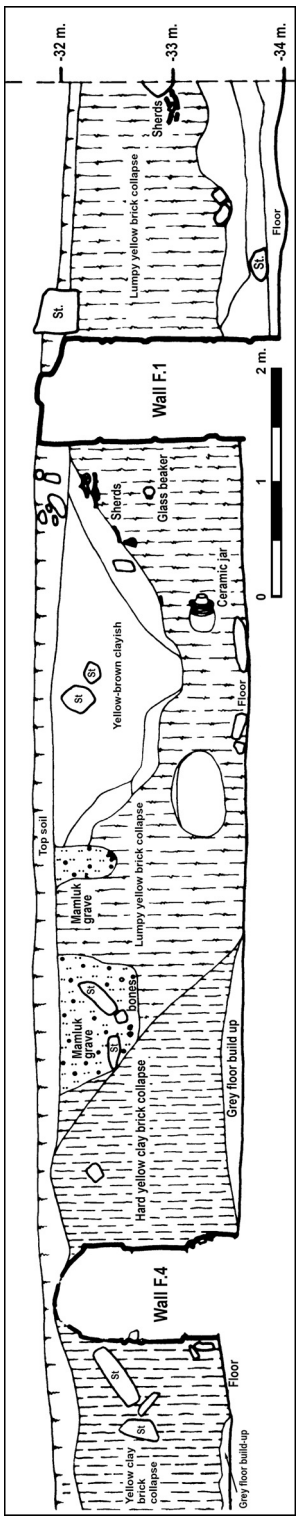

Fig. 5 Representative section through Houses A–B, showing collapse lines and location of objects.

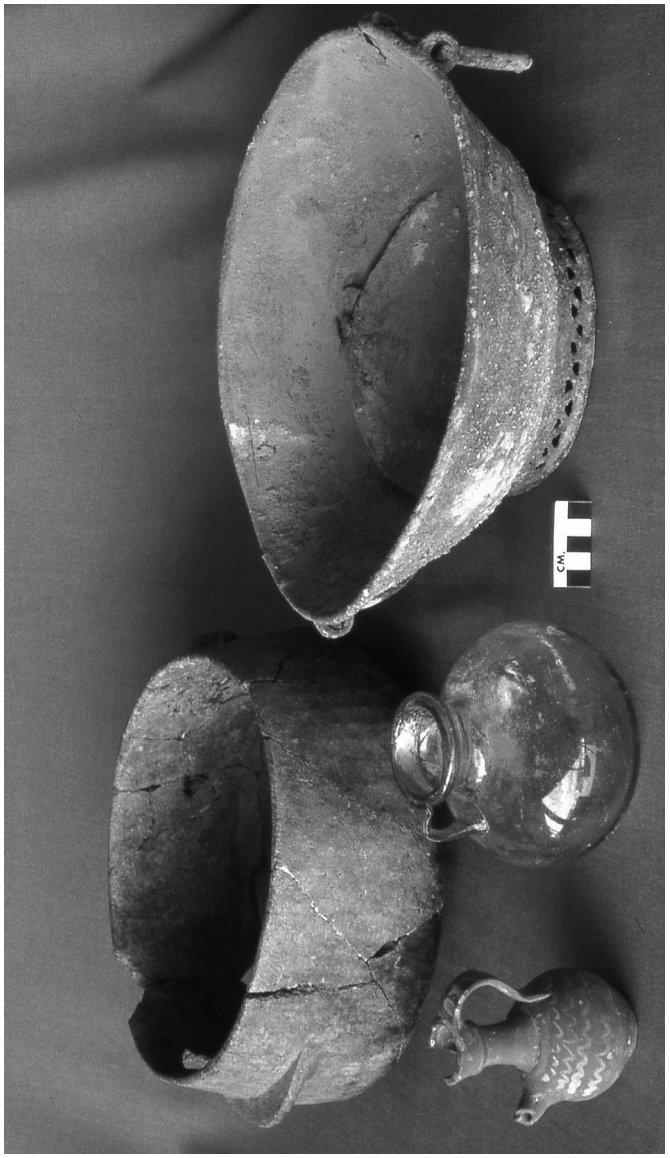

Fig. 6 Selected finds from Houses A–B. Front L: ceramic jug of Jarash manufacture; rear L: steatite cooking vessel, probably from northwest Arabia; centre: glass jug; R: bronze brazier, most likely from Egypt (Walmsley).

Fig. 7 Thin-walled ceramic jars painted with white decoration, made in Jarash (Walmsley).

The lane opened out into a central courtyard, flanked by rooms and with an L-shaped staircase on the west side; this gave access to one or more rooms above the south wing of House G. Extensive ash deposits and working surfaces made from upturned column capitals indicate that the central courtyard was probably used for domestic and/or light industrial purposes. It is unclear where the bent staircase at the north end of room 6 led to, but it may have given access to the raised area between House D and the courtyard of House H (and even the courtyard itself). While no evidence for animal stabling was found in House D, and there were very few finds, room 7 of House D did produce an earthquake victim, indicating occupation. House H is only partially excavated, and lay very close to the surface. It may have been only single storeyed. An earthen courtyard on the west side gave access to a single room (1), north of which lay two rooms (2, 4), with that on the west (2) giving entry to a further room (3). All the rooms were roughly paved. The most impressive of the buildings north of the former street was House G (figs. 8–9), which had a floor area of some 375 m^2 and living space, over two levels, of nearly 750 m^2, and perhaps more, if roof space was also accessed. House G was approached from an open court on its east side via two doorways. The main doorway gave access to an internal court measuring 8.35 by 9.7 m, paved and with a drainage

Fig. 8 The central internal court and western flanking rooms in House G. Background: courtyard of House D (Walmsley).

Fig. 9 Selected ceramic finds from House G (Walmsley).

channel, indicating it was open to the sky. Five internal doorways on the north, west and south gave access to flanking rooms, the details of which are provided in the next section of this paper. Six supports, consisting of 5 columns and a pier, carried an internal balcony some 3 m deep on at least three sides (north, west and south). On the east side of the court a broad stone staircase, 1.25 m wide, ascended northwards to give access to the balcony and, from it, entry to the rooms of the upper floor, the arrangement of which is not known.

House G, as with Houses A and B, has exposed the utter destructiveness inflicted on Pella by the A.D. 749 earthquake. The upper level(s) of brick collapsed instantaneously into the ground floor rooms, trapping people, animals and domestic objects within them; even the chickens pecking about in the central courtyard of House G had no time to flee the tumbling building. In a recent palaeoseismic study of earthquake evidence from Tiberias, dated archaeologically to the A.D. 749 incidence, the magnitude of the quake has been calculated to be in the range 7.0–7.5.[28] The neighbouring site of Scythopolis was utterly flattened, with the still-standing monumental architecture of the Roman and late antique city obliterated by the ferocity of the tremor (fig. 10). Likewise at Jadar, on a ridge overlooking Lake Tiberias, the columns of the main east-west *decumanus* were toppled by the earthquake (fig. 11), permanently terminating the late antique configuration of the town, as at Scythopolis. At Gerasa the evidence is less categorical but suggests at least sections of the town—but not perhaps all of it—were damaged in A.D. 749. Thick levels of building wreckage were encountered above the cathedral steps, in the church of St Theodore and the group of three churches dedicated to SS Cosmas and Damianus, St George and St John the Baptist, which the Yale Mission attributed to earthquake activity in the 8th c.[29] In 2004, further graphic evidence for the impact of the earthquake at Gerasa was recovered from a room on the eastern part of the south *decumanus*, in which was found the crushed skeletal remains of a human victim and a mule accompanied by a hoard of 148 silver *dirhams*, of which three were minted in 130 A.H. (A.D.

[28] Marco *et al.* (2003). See also: http://geophysics.tau.ac.il/personal/shmulik/Galei_Kinneret.htm (09 December 2005). An earthquake in the range 7.0–7.9 is classified as 'major', with only one higher classification (8.0+, 'great'). A major earthquake would be associated with considerable or great damage to ordinary (not specially designed) buildings, as clearly was the case at Pella.

[29] Kraeling (1938) 208, 223, 247–49.

Fig. 10 'The deafening roar of devastation': fallen columns at the crossroads of Baysan; note the impact of the column on the street paving (Walmsley).

Fig. 11 Columns down at Jadar, A.D. 749 (Walmsley).

747/48). Overall, the human and financial loss in the north Jordan valley resulting from the damage inflicted by the earthquake would have been considerable and this is no more apparent, at a micro level, than with House G at Pella.

Arrangement of Households in the Mid-Eighth C.: the Space Syntax of House G

House G was excavated between 1980 and 1983 almost in its entirety, the exception being one room (1) on the lowest south-east corner and one other small room in the north-east corner of the building (room 10, east of room 9; fig. 12), which remain buried. The excavations uncovered a wide range of finds on two levels. Found within the collapse were numerous domestic items that had fallen from the upper floor, such as unglazed ceramic vessels and lamps, copper objects including kohl sticks and a basin, blown glass vessels with ribbon trailing, bone buttons with incised lines and inlay from wood furniture, and stone items including hand grinders and a two-part basalt quern. Entombed on the ground floor level were more domestic items along with many victims of the tragedy, human and animal. Based on the disposition of the artefacts in the collapse and the complete entrapped skeletons on the ground floor, it can be generalised that the downstairs area of the house was devoted to the care of valuable domesticated animals and light workshop activities, whereas the primary living quarters were located upstairs.

The human victims recovered on the ground floor consisted of three adults and a child. A single male was found crouched against the west wall of room 2, with one arm raised above his head in a desperate attempt to protect himself from heavy falling material (fig. 12). Across the inner courtyard in its north-east corner, an adult male and female with a young child were found huddled together under the staircase.[30] Very possibly the couple and the child fell from the upper level (seemingly the balcony or the top of the staircase) before being entombed in the crumbling building. Four gold *dinars* were found with the solitary victim in room 2, and 6 others near the couple in the inner courtyard,

[30] Bourke (1992) 220–21.

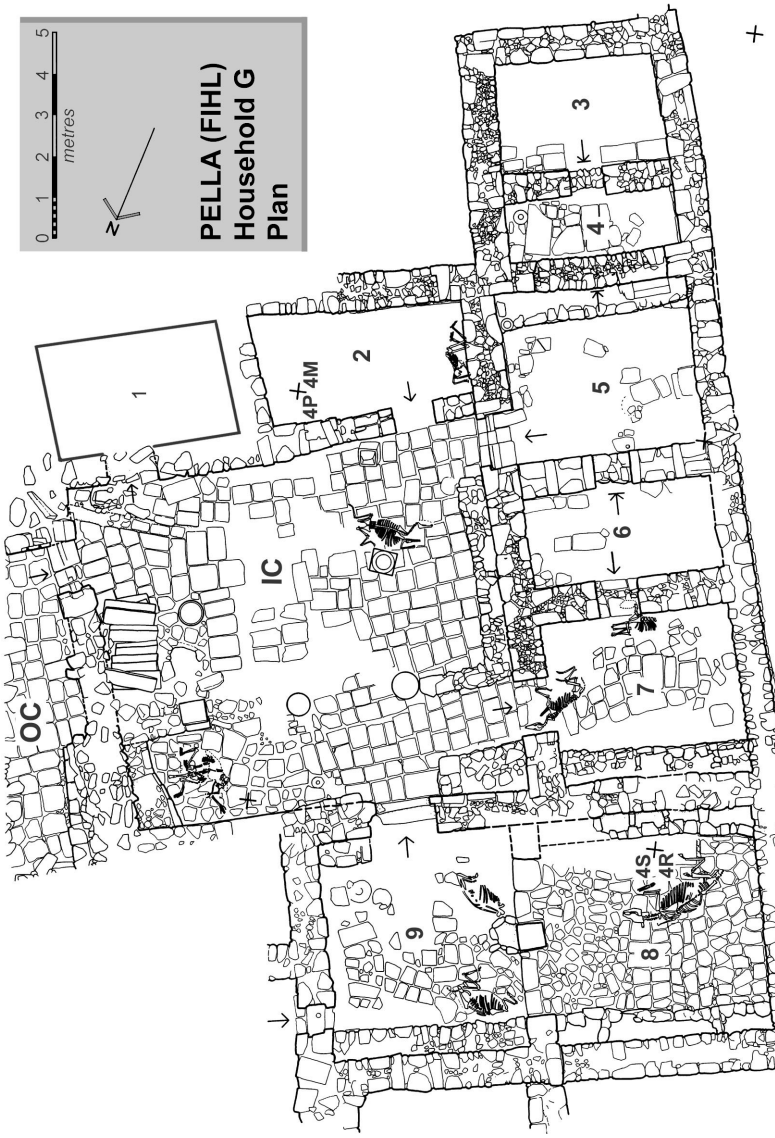

Fig. 12 Detailed plan of House G (Winikoff, modified Walmsley).

perhaps dropped when they fell from the upper storey.[31] In total, 10 *dinars* is not an insignificant amount of money, especially considering that the annual head tax for an adult amounted to some 4 *dinars*. The trapped animals on the ground floor were chiefly cows (rooms 8 and 9, totalling three), small equids (mules or donkeys; inner courtyard, rooms 6 and 7), sheep, goats, chickens and a cat. Apart from the chickens and cat, which roam at will, these animals represented wealth. This is especially the case for the cows and mules (the sheep and goats were few, and may represent special cases such as sickly animals); hence the attempt by their owners to provide sufficient shelter in winter.

Given the requirement to house adequately so many animals in winter, it is not surprising that rooms 7, 8 and 9 and the inner court were equipped with a number of feeding benches along sections of their walls, all of which were later additions. A more permanent fixture in the house was a line of mangers that divided room 5 from room 6, indicating that the housing of animals was always an intended function for at least part of the ground floor, as is well known at other late antique sites such as Umm al-Jimal in the steppe lands of north-east Jordan.[32] At some later date, the centrally-placed doorway in the mangers was roughly, perhaps temporarily, blocked. Nonetheless, by virtue of this blocking and a closable doorway to the inner court, room 5 could be sealed off from the rest of the downstairs. The room was also provided with a long bench on the south side, but this appears to have been a worktable intended for making, maintaining or fixing objects. These activities seem to have been transferred from rooms 3 and 4, where installations and materials for plastering were found as abandoned.

The victim found in room 2, separated from the inner court by a roughly built dividing wall, may have been living in this downstairs space, perhaps intermittently. A robust adult male aged between 25 and 30 years, both his physique and location near the animals would suggest that he was their carer (a job for which, the 4 *dinars* would

[31] Walmsley (2001). As Early Islamic *dinars* always carry a mint date, they provide a useful chronological fix, with dates of 96 A.H./A.D. 714/15, 97 A.H./A.D. 715/16, 106 A.H./A.D. 724/25 and 117 A.H./A.D. 735/36. In the courtyard, six further *dinars* were recovered at the end of the 1982 season, dating to 91 A.H./A.D. 709/10, two of 94 A.H./A.D. 712/13, 110 A.H./A.D. 728/29, 112 A.H./A.D. 730/31 and 122 A.H./A.D. 739/40. Chronologically, the best dating came from a small copper fals minted in Damascus in 126 A.H./A.D. 743/44, struck just a few years before the A.D. 749 earthquake.

[32] See de Vries (1998).

indicate, he was well rewarded). In the north-east corner of room 2 a group of objects used in daily life were found, including ceramic jars and jugs for storage and cooking, a lamp blackened from use, a large metal bowl and the remains of a metal-banded wooden bucket. The ceramics were all local regional wares, notably a red painted ware new to Pella and probably produced around Philadelphia/Amman, a white painted-on red ware from the kilns of Gerasa, and a porous whitish ware from Scythopolis designed for water storage.[33] The painted wares especially show an exuberant freedom of expression in the sweeping abstract designs used in their decoration (fig. 13; see also figs. 7 and 9). Just outside the doorway into room 2, evidence for a small fire was found on the bench against the west wall of the inner courtyard. Probably being used for cooking rather than heating, the fire ignited the collapsed building debris in the inner courtyard, baking the fallen bricks and carbonising organic matter such as wood.

Gradually spreading through the tumbled collapse, the burning eventually reached the trapped couple and child by the staircase (hopefully all dead by this time), unusually preserving their clothing through the process of slow combustion. Although the resultant carbonisation of the material destroyed evidence of its original colouring, a study of the burnt cloth, which was manufactured from silk, was able to identify the different styles of weaving used in its manufacture.[34] Their prestige clothing, the likelihood that they fell from the upper level during the earthquake, and the discovery of 6 *dinars* close by would indicate the greater wealth and status of the couple by the staircase. Perhaps they were the owners of the house and animals, and for whom the male in room 2 worked as a herder.

Based upon the preserved plan of House G's ground floor and the material found in each of the rooms, a schematic representation of movement in and function of the house on the day the earthquake struck can be proposed (fig. 14). However, it needs to be remembered that this reconstruction only applies to this one household and then on one particular winter's day, and perhaps a rather nasty one at that. From a probably public outer courtyard (fig. 14, OC; compare with the plan, fig. 12), entry was gained to a private inner courtyard (IC), both of which were paved to deal with the heavy traffic—human and animal—they

[33] These wares are described in Walmsley (1995).
[34] Eastwood (1992).

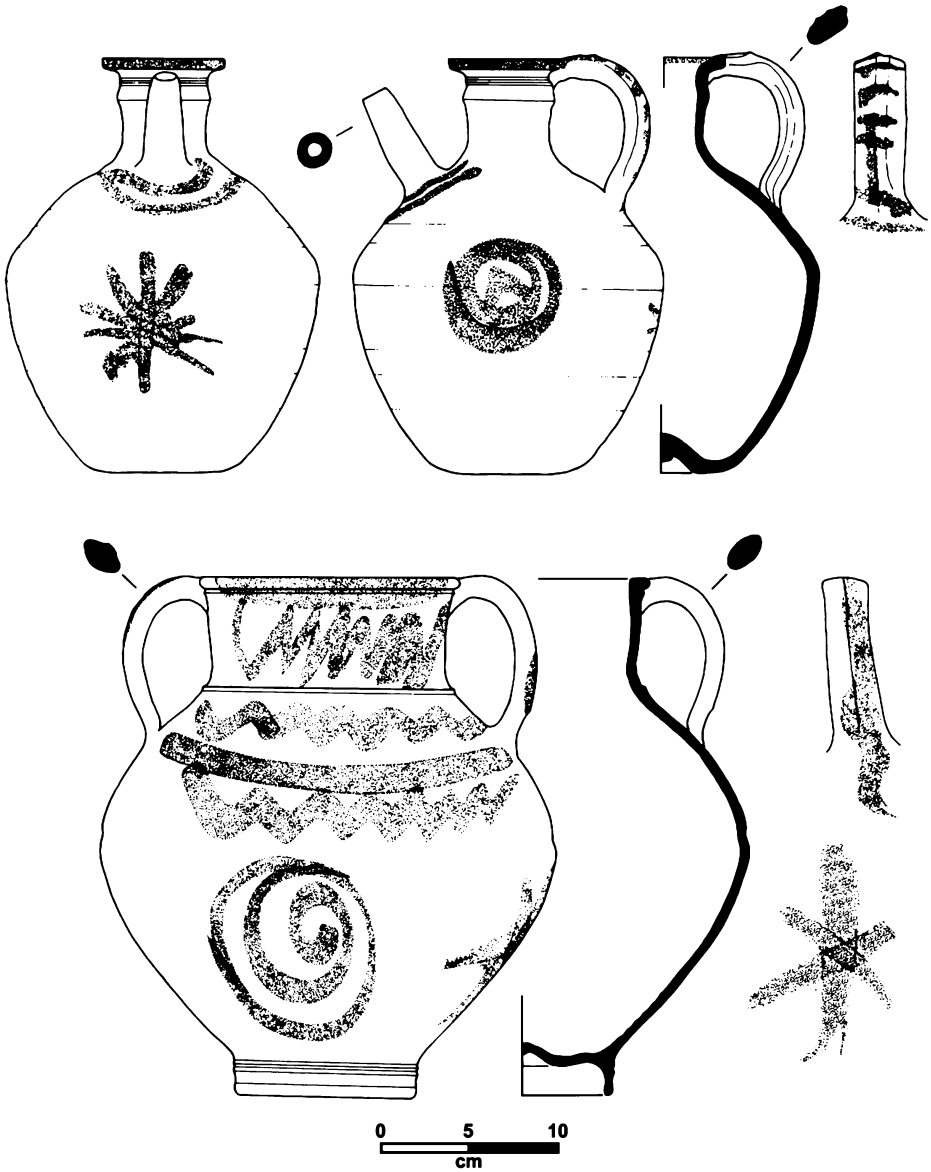

Fig. 13 Red-painted wares from Pella, mid-8th century.

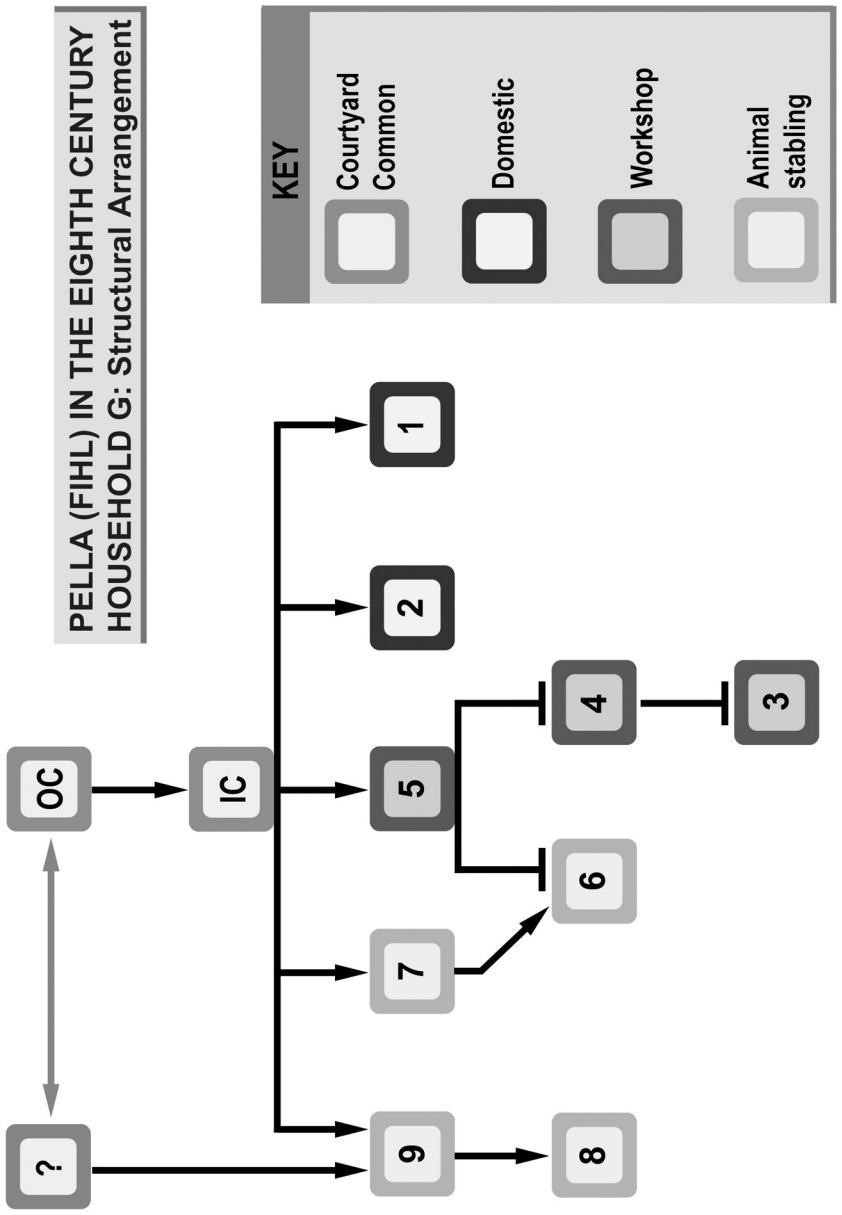

Fig. 14 Spatial arrangement of House G at Pella (Walmsley).

were expected to carry. Much of the daily life of the household in its various aspects focused on the central internal courtyard, as seen in the cooking installation on the bench against the west wall, a stone water trough and, placed against walls, feed benches for the stabled animals. The inner courtyard gave access to two stand-alone rooms on the south side (1, 2). As already noted, the finds in room 2 indicate the use of this space for living purposes, perhaps temporarily in winter. Room 1 may have served a similar purpose. On the north side, a single, wide doorway gave access to room 9. Having a threshold and jambs, the opening could have been closed; the discovery of many iron nails near doorways suggests they were closed with leaves of nailed wooden planks. From room 9, a large room (8) could be accessed through double arches by way of a step. Both room 8 and 9 were stone paved and equipped with feed benches to accommodate animals, specifically cows. Access to room 9 could also be gained by way of a narrow doorway in the east wall, at its northern end (fig. 12). The doorway seems to have given access to another outside court, but was too narrow for large animals and may have been only for human use. Entry to another room (10) may have been possible from the courtyard but the area, which is very disturbed, remains unexcavated.

The layout and function of rooms on the west side of the inner court was more complicated than those to the north and south, especially as the arrangement changed over time. Three rooms (3, 4 and 5) were originally reached by a single, and clearly important, doorway in the south-west corner of the internal courtyard (figs. 12 and 14). The stone threshold and jambs indicate that the doorway into room 5 was, like that into room 9, closable by a wooden door. By way of contrast, the plainer entrance into room 7 appears to have been left open, and at the time of the building's destruction an equid was caught mid-way in the doorway. Room 6, not having its own entrance from the inner courtyard, was originally accessible from both room 5 and room 7 (in fact, rooms 5 and 6 were originally one room with a line of feeding mangers in the centre). In the building's initial configuration, then, it was possible to access room 5 from the courtyard and loop around through rooms 6 and 7 back into the courtyard through the doorway in the north-west corner (and visa versa). At a later time, and perhaps simultaneously, two distinct rooms, 5 and 6, were formed by blocking the central opening in the manger while access to the southern wing of the building (rooms 3 and 4) was also closed off by the construction of a long solid blocking wall between two arch piers (hence, rooms

4 and 5 were also originally one with also, perhaps, room 3 as the wall between it and room 4 is an addition). Room 3 was configured as a workshop of some description, in which basins and white plaster were involved, perhaps following the construction of the added wall between rooms 3 and 4. After access to rooms 3 and 4 was blocked, these activities were relocated in room 5. This changed function for room 5 explains the need to restrict access to it from room 6, which continued to be used for the stabling of animals up until the day of the A.D. 749 earthquake, as it would have been necessary to keep the stabled livestock out of the relocated workshop in room 5.

House G, due to its size, considerable wealth and almost complete excavation, offers one of the best examples of domestic arrangements in the late antique–Early Islamic transition in southern Bilad al-Sham. Yet the preserved plan can only be seen as representing the ground floor arrangement of rooms. The placement of rooms upstairs is uncertain, although the area occupied by rooms 5 and 6 (and possibly 7) may have been combined into one room on the upstairs level. The same may have held for rooms 8 and 9. Entry to the space over rooms 3 and 4 seems to have been gained from a staircase to the west, as previously noted. This may explain the solid blocking inserted between rooms 4 and 5, which prevented entry to rooms 3 and 4 from Building G and, seemingly, from any other entrance. The blocking may indicate that possession of this small part of the house had been transferred to the owner(s) of House D.

Conclusion

The excavation of 6 house units belonging to a domestic quarter at the eastern end of the main mound at Pella has unusually resulted in the recovery of a full range of material culture from a sound archaeological context, including numerous human and animal victims in addition to many objects from daily life. An analysis of these finds shows that household activity was carefully planned and segregated according to social and economic function. The winter arrangement of each unit involved mixed activities, including animal stabling, workshop production, storage and some aspects of daily living (cooking and perhaps transient accommodation), at ground floor level, whereas much of the social life of the household occurred in the rooms of the upper floor. Access to the upstairs living quarters was by a staircase from enclosed

courtyards, ensuring greater privacy. At Pella, the most significant urban transformation that occurred between the mid-7th and mid-8th c. was in the re-arrangement of the domestic quarters, involving a change from contiguous units along gridded streets used for commercial and living purposes to largely independent houses centred on open courtyards. The most pronounced modifications to Pella's urban layout took place on the eastern part of the main mound, perhaps due to the nearby location of the cathedral church market and caravanserai, the two areas being linked by a paved road as mentioned earlier. Such a deduction would argue for a predominantly economic factor behind the remodelling of the Pella houses, with more space being devoted to commercial activities including light industry, the quartering of valuable animals and the provision of high-value foodstuffs, as detailed in the arrangement of House G. These changes were but one part of an intensification and centralisation of social and economic activity in the smaller towns of Bilad al-Sham as seen in excavated structures and associated objects: domestic and production, spatially stratified as with the houses at Pella; commercial, seen at Pella with the central market and caravanserai combined in one facility next to the main public building in the town, the church; and only lastly religious belief systems as such, at Pella still represented by the cathedral church but elsewhere, conspicuously at Gerasa, also through the mosque, strategically positioned at the heart of urban life.[35] Only incidentally, then, can Islam be invoked as a driving factor in the transformation of urban life after Late Antiquity.

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[35] Walmsley and Damgaard (2005).

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KEEPING THE DEMONS OUT OF THE HOUSE: THE ARCHAEOLOGY OF APOTROPAIC STRATEGY AND PRACTICE IN LATE ANTIQUE BUTRINT AND ANTIGONEIA

John Mitchell

Abstract

Amulets and amuletic imagery are characteristic features of the Late Roman world and yet few examples can be localised, physically contextualised or dated. Excavation of the late antique phases of a large peristyle house in the coastal city of Butrint in southern Albania, ancient Epirus Vetus, has produced a remarkable assemblage of apotropaic devices and protective forms which goes some way to correcting this deficiency. These, together with the imagery on a remarkable mosaic pavement in the sanctuary of a small 6th c. A.D. chapel in the nearby ancient city of Antigoneia, show the range of subjects deployed, in a period of increasing social insecurity and urban decline, to assure safety, health and success in life and a safe passage to the next world after death.

Introduction

Evidence for widespread recourse to amuletic protective devices is common from Late Antiquity,[1] although controlled archaeological evidence for this is surprisingly uncommon. Amulets, engraved gemstones, phylacteries, and salutary and apotropaic figures on articles of apparel and on objects of everyday use from both the domestic and the ecclesiastical sphere, have survived in their thousands and are continually coming to light. A representative selection is described and analysed in the catalogue of an exhibition held some years ago at the Krannert Art Museum at Urbana-Champaign.[2] However, all too often, artefacts of this kind are without provenance, a curious and somewhat arbitrary

[1] For concise overviews of the subject, see Engemann (1975); Vikan (1984); Maguire, Maguire and Duncan-Flowers (1989).

[2] Maguire, Maguire and Duncan-Flowers (1989).

L. Lavan, E. Swift, and T. Putzeys (edd.) *Objects in Context, Objects in Use* (Late Antique Archaeology 5 – 2007) (Leiden 2007), pp. 273–310

flotsam and jetsam, landing in the collections of archaeological museums by gift or acquisition from the art market.[3] While their form and imagery can be investigated and analysed, the contexts in which they were used and abandoned are nearly always unknown, and the places of their origin and their date often a matter of more or less controlled and derivative guesswork. A rare exception to this state of affairs is the assemblage of amulets, phylacteries and bells found in the ruins of a group of 7th c. A.D. houses at the Cilician coastal city of Anemurium, in southern Turkey, which has been analysed by J. Russell.[4] The aim of the present paper is to consider another group of material of this kind, which has come to light during recent excavations at Butrint in southern Albania. In a strict sense the assemblage from Butrint is smaller than that from Anemurium, but in its scope in some ways it is more various and wide-ranging.

Russell began his paper on the amulets of Anemurium by drawing attention to the survival of what he terms magical practices—practices which it might be more precise to call superstitious, empowering, salutary—in modern southern Turkey, where people still tie strips of white cloth to small trees in order to ensure success in a particular objective, to effect the cure of an ailment or to facilitate the conception and safe birth of a child.[5]

Practices of this sort are still very much alive in the geographical area of the assemblage which is the subject of this paper, the coastal regions of southern Albania; where it is the usual custom when constructing a house to set up a more or less life-size anthropomorphic figure in an

[3] Where a provenance is recorded or guessed at for objects of this kind, it is all too often sweepingly generic, such as Asia Minor, Egypt, Syria or Palestine, East Mediterranean: e.g., Maguire, Maguire, Duncan-Flowers (1989). The recently published catalogue of magic gemstones in the British Museum is instructive; see Michel (2001a). Of the 649 items only 35 have provenances which may relate to their places of origin, and not one of these can be associated with a particular site, let alone a precise archaeological context: Alexandria (2, 22, 165, 267, 410, 424), Beirut (582), Caesarea (420), Cairo (381), Catania (475), Constantinople (278, 414, 584), Ephesus (473), Gaza (320), Jerusalem (593), Karnack (461), Naples (519), Nazareth (323), Smyrna (189, 236, 279), Strassburg (454), Tartus (472, 596–8), Egypt (538), the Syrian coast (367, 371), the Syrian Desert (147, 251), the East (301). The situation with the corpus of *lamellae* with magical inscriptions in Greek, of known provenance, published by Kotansky (1994) is similar; very few are from controlled stratigraphic contexts in scientific excavations.

[4] Russell (1995). A further site in modern Turkey on which amulets have been found in controlled archaeological contexts is Sagalassos, in ancient Pisidia: three uniform copper circular pendants with a powerful nimbed rider spearing a female on one side, and on the other side the legend 'seal of Solomon help' circling a cruciform configuration of four discs; see Waelkens and Poblome (1997) 337–38, nos. 289–91.

[5] Russell (1995) 35–36.

elevated and visually prominent position (fig. 1). These are rough human simulacra, quite summarily fashioned of old clothes and scrap material. They can assume striking, if ghostly, likenesses of human presences and can catch one's eye and even haunt one's imagination quite dramatically on first acquaintance. Their purpose is generally apotropaic, to safeguard a structure from any untoward calamity which might befall it, whether from misfortune or from the envious glances and ambitions of a neighbour. They remain up during construction, watching over the building while it is open to the winds, with the windows and doors still bare holes; and they can stay in place even after the occupants have moved in, if further work, like an extension or second storey, is planned for the future. Even though the practice is widespread, and potential informants are everywhere, it is not easy to get a clear and straightforward explanation of what these figures signify, what they mean to people, what their history is. When questioned, people tend to be surprisingly reticent and vague in their answers. On the one hand there is mild surprise that one should want to focus on this as a subject of serious consideration, on the other embarrassed laughter. However, the notion of securing the safety and prosperity of a house and its occupants by the incorporation of appropriate imagery in its fabric is something that is well attested in many cultures across the world and through time. Visual strategies of this kind were common in the Roman world and in Late Antiquity;[6] a well-documented instance of the phenomenon can be found in a major Late Roman house in the Late Roman city of Butrint.

The Tri-conch House, Butrint

Over the past few years, one of the principal foci of excavations at the coastal city of Butrint, ancient *Buthrotum*, in the old province of Epirus Vetus, just across the straits from Corfu, has been the Late Roman extension of the settlement in the low-lying area between the monumental buildings of the Hellenistic city clustered round the foot of the acropolis and the Vivari Channel which connects Lake Butrint with the sea (fig. 2). Attention here has focused on a large *domus*, a palatial urban residence, with a south front facing onto the water. The

[6] Prentice (1906); Johns (1982) 62–75; Maguire, Maguire and Duncan-Flowers (1989).

Fig. 1 Protective simulacrum on house in the village of Ksamili, south-western Albania (author).

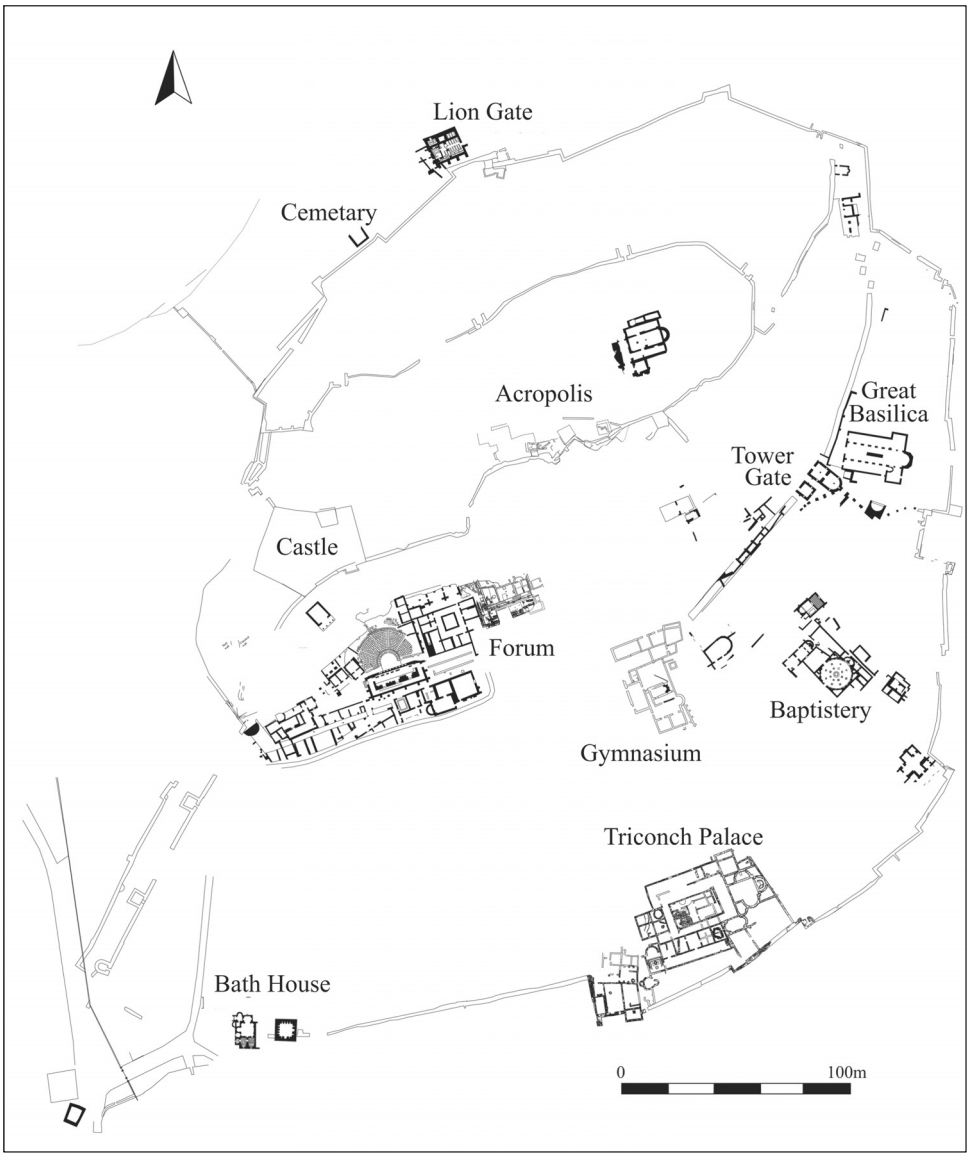

Fig. 2 Butrint, overall plan of the city and site (Butrint Foundation).

greater part of this has now been excavated, revealing 5 major pre-abandonment phases between the late 3rd and the 1st half of the 5th c. A.D. (figs. 3–4).[7]

In its central phases, in the 4th c., this was one of the grandest residences in the Late Roman city, a large complex with ranges of rooms deployed around a central peristyle court (fig. 3). The main entrance in this period lay to the west, where the visitor traversed a square vestibule with a two-columned tribelon screen on each of its 4 sides. After crossing the mosaic pavements of the walks of the peristyle, one could have passed though one of a series of rooms off the southern walk and come into a long gallery which extended along the southern waterfront of the building. At the eastern end of this gallery was a little vestibule with another entrance to the house; the vestibule was embellished with a fine mosaic floor in small *tesserae*, and had walls painted in imitation of an open colonnade. At its other end, the gallery led into an apsidal hall, the principal reception room of the house in this phase.

In the early 5th c., around A.D. 420, the house underwent a major reconstruction and reorganisation (fig. 4). The central court was considerably enlarged to the north and east, and a major new ceremonial entrance leading in from the water was created at its south-east corner, leading to a massive tri-conch hall with adjoining chambers, along the eastern side of the house. This transformation involved the complete demolition and reconstruction of the northern and eastern ranges of the peristyle. However, it would seem that this project was not completed. New walls were erected and roofed but the floors relating to the reconfigured peristyle and to the tri-conch and the new southern entrance were never laid. The reasons for this abrupt abandonment are not clear, although one factor may have been a rising water-table. There is some evidence for seasonal flooding of the southern ranges of the building in this period. Subsequently, around A.D. 470, a new defensive wall was built to enclose the southern part of the town on the low-lying land by the water, and this ran across the front of the *domus*, effectively cutting it off from the water. Around the time of this drastic intervention, the owners seem to have abandoned the house to more casual occupation.

[7] Gilkes and Lako (2004); Hodges (2006) 121–24; Bowden, Hodges and Lako (forthcoming); Bowden and Mitchell (2007).

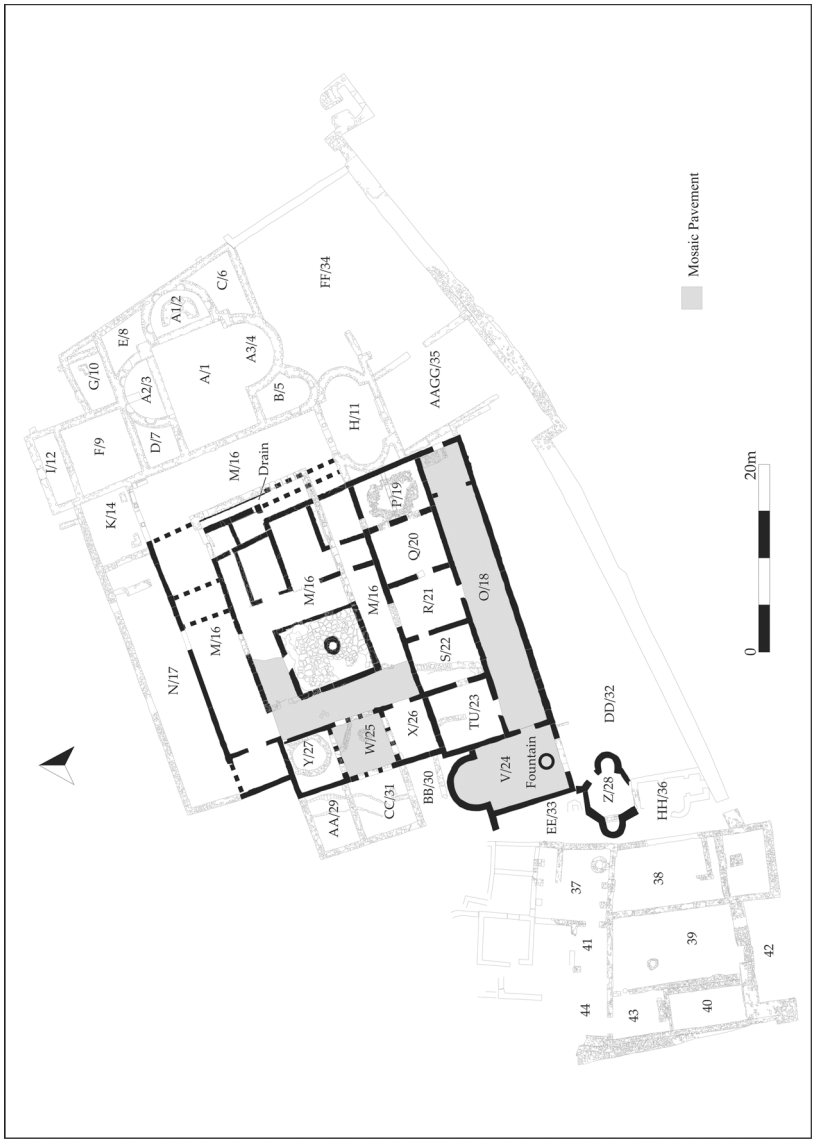

Fig. 3 The Tri-conch *domus*, Butrint, plan of the excavated structures, phase 3, *ca.* 400 A.D. (Butrint Foundation).

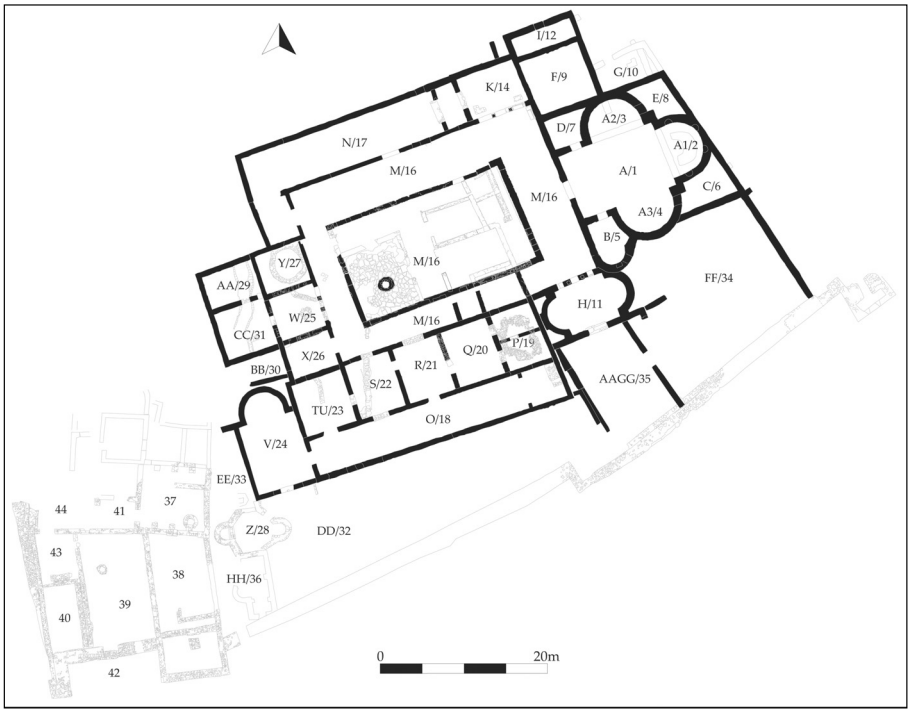

Fig. 4 The Tri-conch *domus*, Butrint, plan of the excavated structures, phase 4, early 5th c. A.D. (Butrint Foundation).

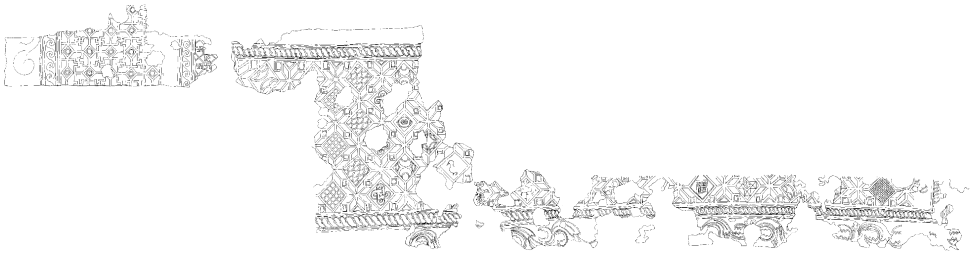

Fig. 5 The Tri-conch domus, Butrint, scheme of pavement in the western walk of the peristyle (Butrint Foundation).

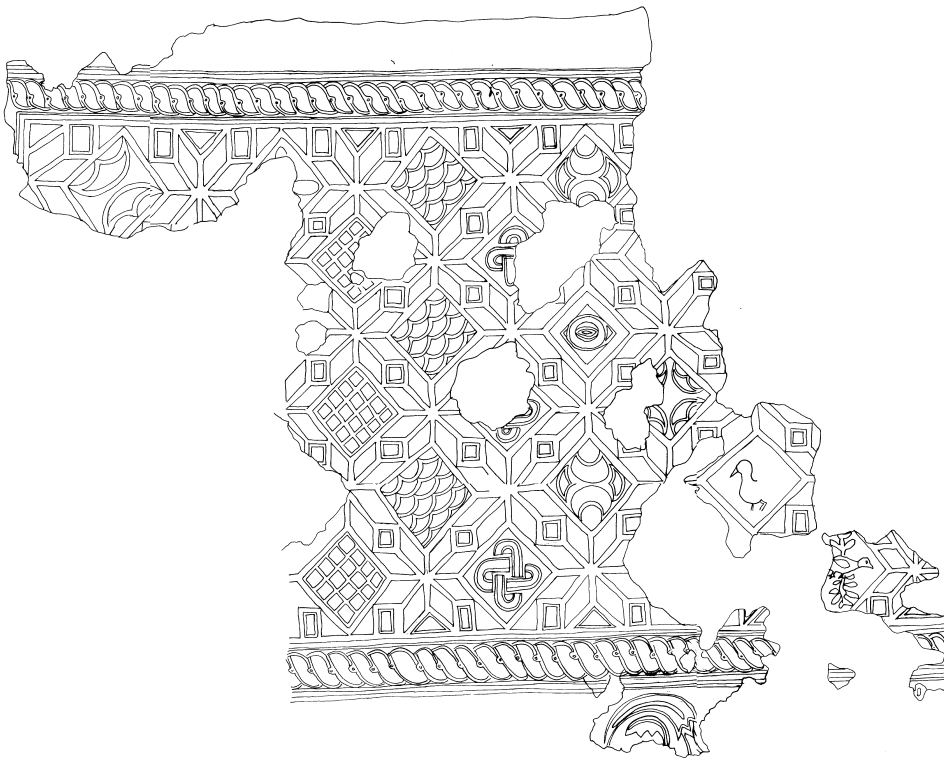

Fig. 6 The Tri-conch *domus*, Butrint, scheme of pavement in the western walk of the peristyle, detail (Butrint Foundation).

Apotropaic Imagery in the Tri-conch House

In both its late 4th and early 5th c. phases, the house was provided with built-in imagery which would appear to have been designed to ensure its security and the well-being of its owner and occupants.[8] Around A.D. 400, apotropaic motifs were incorporated into the mosaic pavement of the western walk of the peristyle, immediately in front of the main western entrance (figs. 5–6). Here the pavement was somewhat damaged, although the overall scheme is clear, an outlined orthogonal pattern of tangent 8–lozenge stars forming poised squares and smaller axial squares. It is the large poised squares that constitute the dominant

[8] The imagery and artefacts from the Tri-conch House referred to here will all be discussed in detail in Bowden, Hodges and Lako (forthcoming).

accents here. These are filled with a variety of patterns and motifs: a reticulated grid, overlapping semi-circular scales, peltas and crescents in various formations, a series of crosses, cruciform knots of Solomon, individual birds in profile, and a single large eye. The poor state of preservation of the floor, considerable areas of which are now devoid of *tesserae*, means that the detailed distribution of these motifs cannot be reconstructed in its entirety. However, the broad sense of their disposition can be determined.

An area immediately in front of the columnar entrance from the western vestibule is bounded to the left (north) by a row of three poised squares containing so-called knots of Solomon in pink and blue ribbons contoured in white against a black ground. This row more or less aligns with the northern opening of the tripartite entrance. The corresponding area of the pavement to the south is now largely lost, but if this was laid out in symmetrical fashion to the scheme to the north, a row of poised squares with Solomon's knots would also have been aligned with the southern opening of the entrance. In fact, one of these is preserved, in this position, hard against the west wall, suggesting that these registers of squares were indeed symmetrical in their disposition. These two sequences of poised squares bounded a central area, directly in front of the western entrance from the vestibule, in which there appears to have been a concentration of potent imagery. The squares within this central area, immediately to the east of the threshold, contain blue birds, detailed in red, standing among blue leaves and red flowers. Beyond these, in the middle of the walk, more or less aligned with the left column-base of the entrance, is a square containing a large eye, picked out in white and a brilliant orange-red, the so-called Evil Eye (fig. 7). The other squares preserved in this area contain another bird and various configurations of peltas and crescents.

The Evil Eye, the central motif in this liminal assemblage of devices and motifs, was widely deployed in Late Antiquity to provide protection against the effects of envy or any entering malicious spirit.[9] This was the eye of the envious, covetous, harmful gaze, designed to catch and hold any intruding force which might seek to upset the spiritual or physical well-being of the house and its occupants. The incorporation of this motif on amulets and other artefacts of everyday use was widespread

[9] Bonner (1950) 97–100; Engemann (1975) 24–40, 24, n. 13 for principal earlier literature; Dunbabin and Dickie 1983; Trilling (1995) 70.

in the period; its use as the focal device in a mosaic pavement in a critical area is attested but is not particularly common.[10]

The knot of Solomon was another widely-used device with a similar virtue. Combining the protective powers of the cross and the knot, it was deployed throughout the Mediterranean basin in Late Antiquity on floor mosaics and on many other types of surface, in both the public and the private sphere.[11] Occasionally, the power and purpose of the motif is confirmed by some accompanying complementary element such as an inscription, as is the case in the nave of the church in Shunah al-Janubiyah, in Jordan, where a prominent double knot in the mosaic pavement at the start of the nave is circled by the words: 'God be with us'.[12] Similarly, the symbolic values associated with birds and flowering plants are clear from innumerable instances where these figures are used as signifiers of the abundance of creation and beyond that of Paradise and the blessed souls which inhabit it.[13] The meanings of motifs such as peltas, crescents, stacked overlapping tiles/leaves and reticulated grids are less easy to pin down. However, it is clear from their repeated use on pavements throughout the Late Roman world, sometimes in combination with more overtly protective symbols, that these were also understood as potentially active devices which could contribute to the empowering of a variety of critical locations, in both domestic and religious contexts, points of entry, areas designed for the display of status, and sites of particular sanctity.[14]

This configuration of elements in front of the entrance to the peristyle of the *domus* is complemented by a further strip of 5 poised squares immediately to the south, lying adjacent to the west wall of the walk. These seem to constitute a purposeful sequence. One of the squares contains opposed pink peltas on white and another has an indecipherable configuration of pink, blue and red triangles, but each of the remaining

[10] Engemann (1975) discusses a number of images of the eye assailed in mosaic pavements at Jekmejeh, near Antioch (pl. 10a), in the vestibule of a sanctuary of Cybele and Attis—the so-called Basilica Hilariana—on the Caelian hill in Rome (pl. 11a–b), and at Sousse, in Tunisia (pl. 14c).

[11] Deloche (1900) 167–68, no. 150; Maguire, Maguire and Duncan-Flowers (1989) 3–4; Sansoni (1998). The tradition of associating apotropaic powers with crosses and knots has been discussed by Trilling (1995) 70–76.

[12] Maguire, Maguire and Duncan-Flowers (1989) 3, fig. 3; Piccirillo (1993) 320–23; Kitzinger (1993) 4, fig. 1.2; Sansoni (1998) 87, fig. 93.

[13] Maguire (1997); Maguire, Maguire and Duncan-Flowers (1989) 9–13.

[14] Meates (1979) pls. XV, XVII; Neal (1981) mosaic 61; Neal (1991) 14; Sansoni (1998) figs. 71–72.

three carries a particular design—three variations on the cross (fig. 7): one has an 8-armed star and a lozenge of black lines superimposed on a red axial cross, so as to give little saltires in the 4 quarters; another has a large axial cross with its arms segmented into pale blue and white triangles and with a small back poised square at its centre, enclosing a little black cross in a red field; and the third has another large red axial cross contoured in black and white against a pink ground, with the outlining *tesserae* laid in serrated sequence to create a vibrant contour. The peculiar insistence on the cross here suggests Christian reference. The apotropaic function of the cross, the most powerful protective device in the Christian arsenal, was of course a constant of everyday life in Late Antiquity and the early Middle Ages.[15]

It is likely that this sequence is related to the empowered squares in the central area of the panel and forms part of an extensive articulated configuration of emblems with apotropaic as well as ornamental values, designed to stake out and protect the front walk of the principal internal court of the house, and symbolically ensure that no malign influence could cross the main western threshold to the peristyle at the heart of the residence.

There is a further feature at the western entrance which may also have served to safeguard the main approach to the interior of the house. This is an inscription incorporated into the mosaic pavement of the square vestibule, Room 25, at the point at which this floor abuts the threshold into the west walk of the inner peristyle court (fig. 8).[16] The mosaic and inscription belongs to a late 4th c. phase of the *domus* and was left in position when, around A.D. 420, this point ceased to function as an entrance, and a new suite of rooms was constructed around the old vestibule, with side chambers now accessed via columnar screens on all 4 sides. The stylobate for the eastern screen which gave onto the peristyle partially cuts through the mosaic inscription. The inscription, in red *tesserae*, is too fragmentary to be read in its entirety, but it appears to refer to the owner of the house and his rank. The surviving part has been read tentatively as [. . .]Α Μαρίω τω

[15] Brandenburg (1969); Stevens (1977); Kitzinger (1970); Engemann (1975) 42–48; Maguire, Maguire and Duncan-Flowers (1989) 18–22; Flint (1991) 173–78; Trilling (1995) 73; Frankfurter (2004) 107–109.

[16] Bowden, Hodges and Lako (2002) 205, fig. 7a.

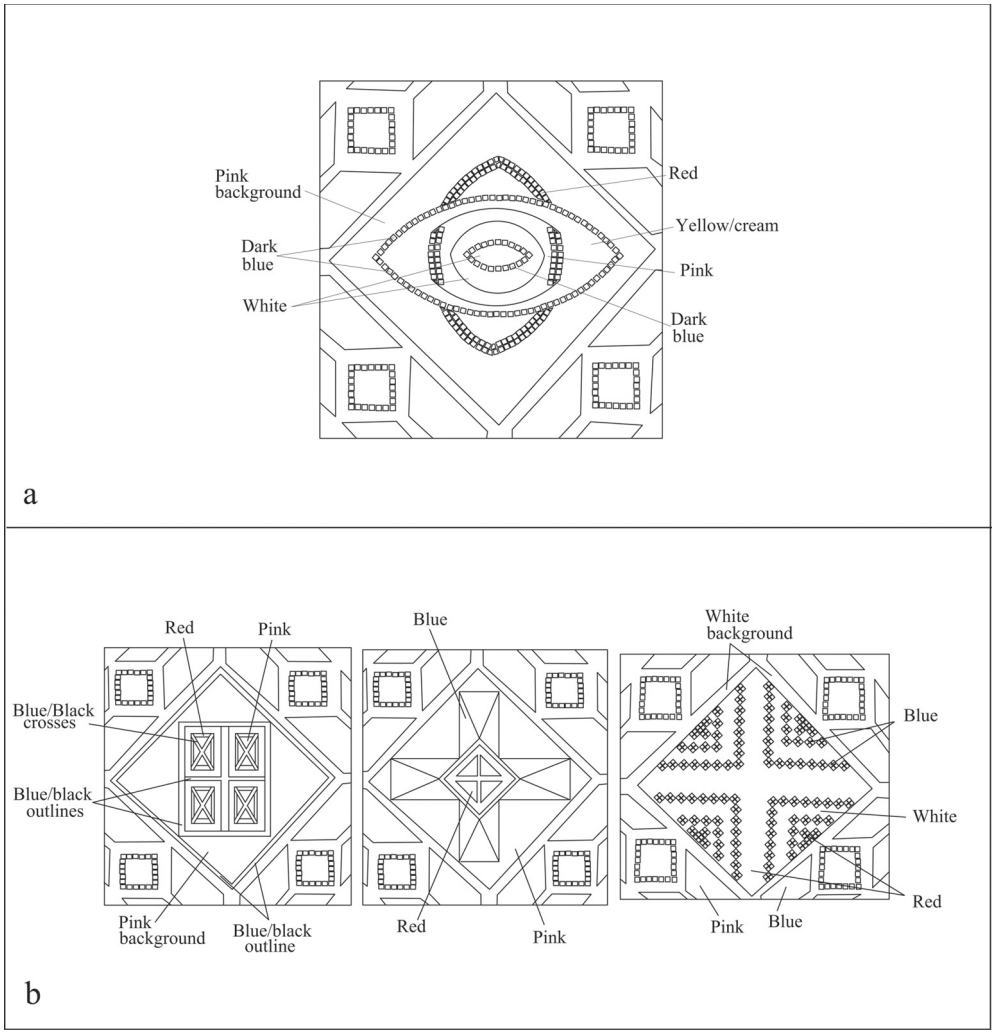

Fig. 7 The Tri-conch *domus*, eye in the pavement of the western walk of the peristyle (Butrint Foundation). The Tri-conch *domus*, crosses in pavement along west wall of western walk of the peristyle (Butrint Foundation).

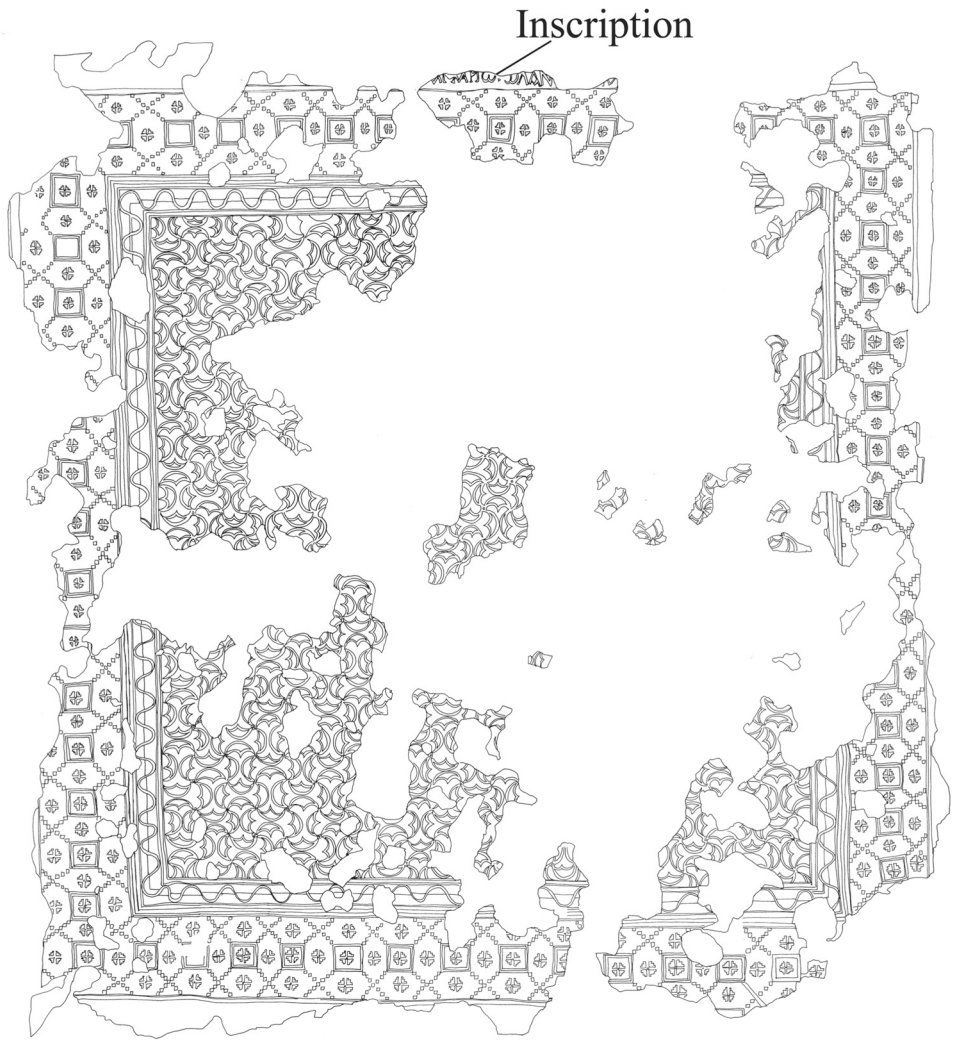

Fig. 8 The Tri-conch *domus*, mosaic pavement of Room 25 and inscription lying adjacent to the threshold leading to the western walk of the peristyle (Butrint Foundation).

λανπ[ρ]οτά[τω…], giving a name or title ending in…*arius* and a rank *to lamprotato* equivalent to that of *clarissimus*, of senatorial status.[17]

On one level, this inscription greets the visitor and introduces the owner of the house. However, in the Late Roman world the written word was widely deployed on buildings with an apotropaic force; the practice of inscribing protective legends and devices on the lintels of houses in Late Roman Syria was addressed by W. Prentice over a century ago, in a seminal article.[18] Letters could be as powerful as images in warding off evil, and early Christian houses and their contents were protected by both. An instance of a similar phenomenon from the 7th c. is an inscription of nonsensical words, *voces mysticae*, on one of the 4 steps leading down to the funerary oratory of Mellebaudis, the so-called *Hypogée des Dunes*, near Poitiers.[19] This, together with apotropaic devices on the other three steps, was designed to cause confusion and to keep the deceased safe from the intrusions of passing malevolent spirits. The threshold legend at Butrint, with the name of the master of the house together with his titles, could have functioned in a similar way. Here the illustrious name of the owner would have had something of the power of the names, titles and images of emperors on the medallions and coins which were commonly worn as pendants in this period to secure for the wearer the visible protection of a puissant patron.[20] It is probably legitimate to see this threshold inscription as having, on one level, a guarding role, confronting the intruder with the name and title of the powerful owner. As Prentice observed, "as is well known, evil spirits, however ethereal, do not penetrate solid walls, but, like the rest of us, enter by the door or perhaps through a window".[21]

So, similarly, in a rather different context, in the final early 5th c. phase of the *domus*, devices of arguably apotropaic purpose were incorporated into the design of the stone grilles which filled the main windows on the façade of the tri-conch dining hall (fig. 9). Fragments of 4 of these were found where they had fallen in the 6th c., into a drain which runs north-south across the front of the tri-conch.[22] The overall design is one

[17] C. Roueché (pers. comm.).
[18] Prentice (1906). See also Maguire, Maguire and Duncan-Flowers (1989) 16–18.
[19] Hubert, Porcher and Volbach (1969) 56–59, figs. 68, 70–71; Kitzinger (1993) 4–6, fig. 1.5. On *voces mysticae*, see Gager (1992) 4–12.
[20] Maguire (1997).
[21] Prentice (1906) 138.
[22] Bowden, Hodges and Lako (2002) 208, fig. 9; Bowden, Hodges and Lako (forthcoming).

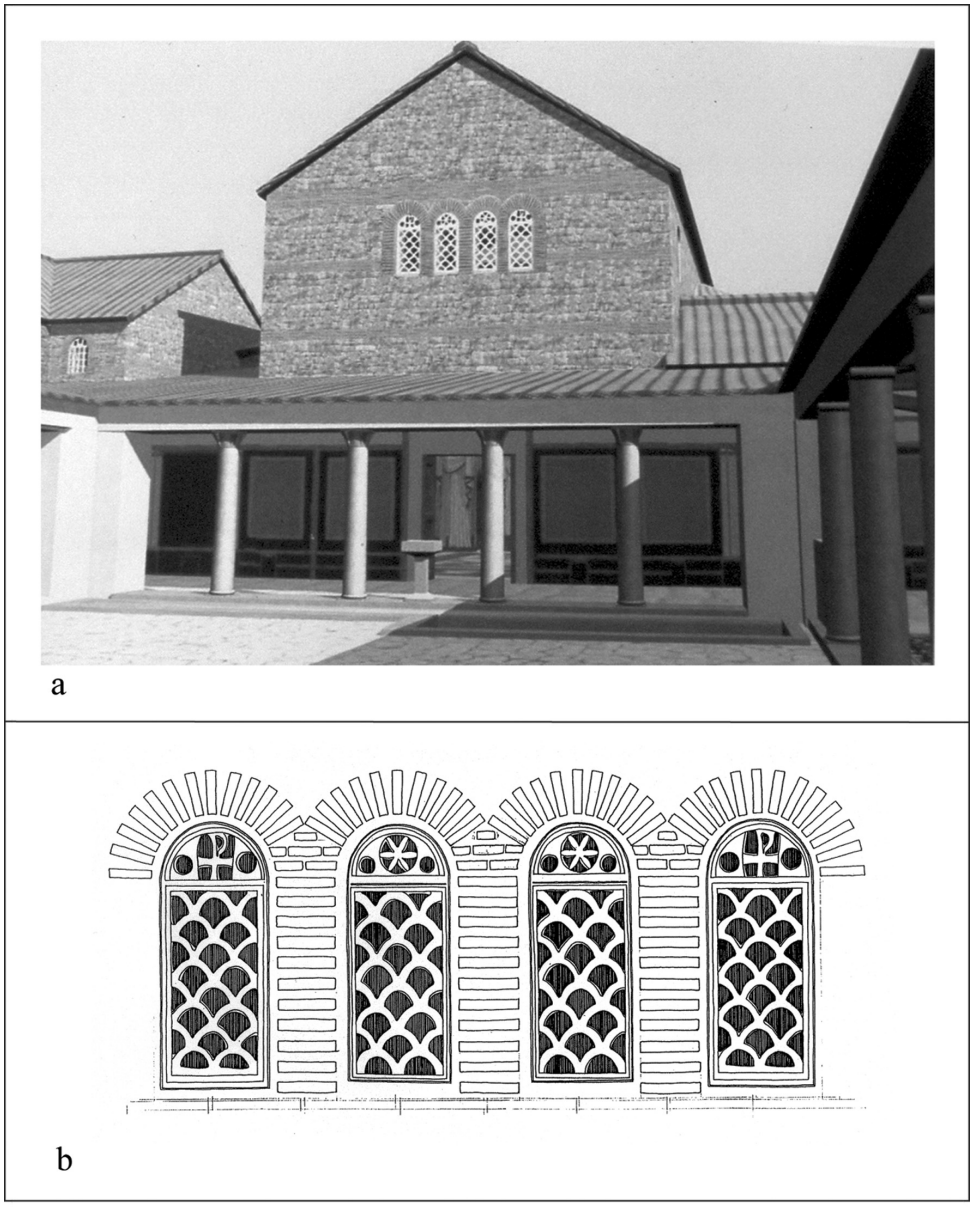

Fig. 9 a) The Tri-conch domus, façade of tri-conch, reconstruction (Butrint Foundation). b) The Tri-conch domus, stone grilles of windows from façade of tri-conch (Butrint Foundation).

of overlapping scales, incorporating at the top, in two cases, an upright cross-*Chi Rho* monogram and in the two other windows a 6-pointed star. These could be interpreted as merely alluding to the Christian faith of the owner of the house; but the *Chi Rho* has an extensive history of use as a protective symbol in Late Antiquity,[23] and the 8- or 6-pointed star is a device widely deployed in the imagery of so-called magic, amuletic, Late Roman gemstones.[24] On an active symbolic level, these emblematic grilles would have functioned to protect the hall and the owner's guests from evil spirits and demons which might slip through the open grilles of the windows with a breath of wind or on a shaft of light.

Protective Amulets from the Tri-conch House

I now want to turn from the fabric of the house to consider some of the portable artefacts which were left behind by those who occupied or passed through the building. These are amulets and small articles of apparel bearing protective imagery, of the kind that almost everyone seems to have worn in Late Antiquity and which have survived in considerable quantity and in all manner of forms. As we have seen, it is rare for these to be found in controlled stratigraphically excavated contexts; the vast majority in public collections throughout the world are stray pieces from the market, without provenance or context. The artefacts found at Butrint, however, do come from a known place, from a particular building—all from the Tri-conch House—and most were found in datable stratified contexts. Taken together with the devices incorporated in the fabric of the building itself, they constitute an assemblage which, though not extensive, may reveal something of the everyday practices, beliefs, and mind-sets of the owners and their friends and dependents and of the habits of their successors who used the building after it had been abandoned in the early 5th c.

One of the most widely used of these amulets, as luck would have it, was overlooked during excavation, to be retrieved from a spoil heap of material deriving from the western range of the *domus*. This is a

[23] Brandenburg (1969); Kitzinger (1970); Engemann (1975), Maguire, Maguire and Duncan Flowers (1989) 21.

[24] For examples, see Michel (2001a) *passim.* On the star as a talisman and symbol of health, see Walter (2000b) 421, citing Perdrizet (1922) 35–38; Vikan (1984) 78.

two-sided copper tag of a type of quite common occurrence (fig. 10a). On the one side is a powerful horseman with haloed head and flying cloak who lances a prone figure, while an accompanying lion bounds along below. The legend, as is usual on amulets of this type, reads: '*εις θεος ο νικων τα κακα*': 'One god who conquers evil'. This holy rider can be identified with Solomon, the master of demons, who with the seal-ring he had received from the angel Michael was empowered to control and bind all evil spirits. The indistinct creature he lances is the female monster of many cultures and names, Lilith, Alabasdria, Gyllou, Obyzouth, who according to the Testament of Solomon, a popular magical treatise of the 1st–3rd c. A.D., visited women in childbed and sought to strangle their children at birth.[25]

The image on the other face of the pendant shows the much-suffering eye assailed by spears and a trident from above, and by an array of aggressive creatures, a lion and a leopard at either side, and two serpents, a scorpion and an ibis beneath. At the top is inscribed the powerful formula 'Ιαω Σαβαωθ Μιχαηλ βοηθι': 'Iao/Jawe, Lord of Hosts, Michael, help', calling on a popular trinity of protective powers of Jewish association. This device, like the eye in the mosaic pavement of the peristyle, was the antidote prescribed in the Testament of Solomon to nullify the effects of the Evil Eye, the look of envy, commonly identified as *phthonos*, whose bewitching glance was feared by all; and which could kill domestic animals, destroy crops, make women barren, kill children, and destroy fortune, possessions and health.[26] Its power was negated by the forces arrayed against it on the amulet.[27] Copper two-sided amulets of this type are thought to have been worn by women to guard against mishap in childbirth and possibly by children for their well-being.[28] Examples are usually dated rather indiscriminately to the

[25] The basic study of apotropaic riders in imagery of this kind is Perdrizet (1922). For amulets with this imagery, see Bonner (1950) 208–12, pls. XIV–XV, nos. 298–303; Engemann (1975) 25, 37–40; Russell (1982); Vikan (1984) 79–80; Russell (1995) 40–41; Walter (2000a); Walter (2000b). For Lilith/Alabasdria/Gyllou/Obyzouth, see the Testament of Solomon chapt. 13 (transl. Duling (1983) 973–974); Vikan (1984) 79; Maguire, Maguire, and Duncan-Flowers (1989) 25–28.

[26] Dunbabin and Dickie (1983); Russell (1995) 37.

[27] For this imagery, see McCown (1922) 58; Perdrizet (1922) 27–32; Bonner (1950) 208–12; Engemann (1975) 37–40; Maguire, Maguire and Duncan-Flowers (1989) 4–5, 216.

[28] Bonner (1950); Vikan (1984); Maguire, Maguire and Duncan-Flowers (1989) 26–28. On uterine magic and amulets, see also Aubert (1989), esp. 441–48.

4th–7th,[29] 5th–6th,[30] or 6th–7th c.[31] An example from Anemurium, cast in low relief, was found in an early 7th c. context.[32]

Another little copper amulet with a loop for suspension was found in a trampled deposit of silt containing late 4th and early 5th c. coins and pottery of the early-mid 6th c., over the pavement of the apsidal reception hall (Room 24) at the western end of the long gallery (fig. 10b). On one side it carries the frontal image of a serpent-legged creature holding out what looks like a shield in its left hand and an implement of some kind in its right. This seems to be a somewhat debased image of the great all-powerful god of light, Iao, a manifestation of the Jewish God Jahweh, associated with Abrasax, one of the most popular *voces magicae* of the late antique world and lord of the year and time. Iao is commonly represented on amuletic gemstones with cock's head, soldier's body and serpents for legs, brandishing a whip in his right hand and a round shield in his left.[33] On the other side of the disc are what appear to be the Roman letters NR in reverse. Both sides carry inscriptions on their rims, neither of which has yet been deciphered. This, then, is a pendant carrying an image of an all-powerful divinity, which was a much-favoured image on gemstones in the late imperial period. The incomprehensible legends on both faces may be intentionally nonsensical combinations of characters designed to confuse threatening demonic powers. It is not clear whether amulets of this kind were thought to embody healing powers relating to a particular category of medical condition, as was the case with certain other types,[34] or whether they were seen as being generally efficacious in putting the wearer under the protection of the all-powerful cosmic deity and ensnaring evil spirits with irresolvable magic formulas.

A third little pendant may also have been worn as an amulet. This is a small copper disc, perforated by 6 small circular holes (one of which is central), and embellished with decorative nicks round its rim

[29] Maguire, Maguire and Duncan-Flowers (1989) 216.
[30] Michel (2001b) 280–82.
[31] Ćurčić and St. Clair (1986) 81.
[32] Russell (1995) 39–40, 46, 79, figs. 5–6.
[33] On Iao/Abrasax, see Bonner (1950) 123–39, pls. VII–IX; Nilsson (1951); Goodenough (1951); Barb (1957); Post (1979); Brashear (1995) 3577. For gemstones with images of this divinity, see the catalogues: Delatte and Derchain (1964); Philipp (1986); Michel (2001a) nos. 181–242; Michel (2001b). On *voces magicae*, see Brashear (1995) 3429–38, 3576–3603.
[34] Vikan (1984).

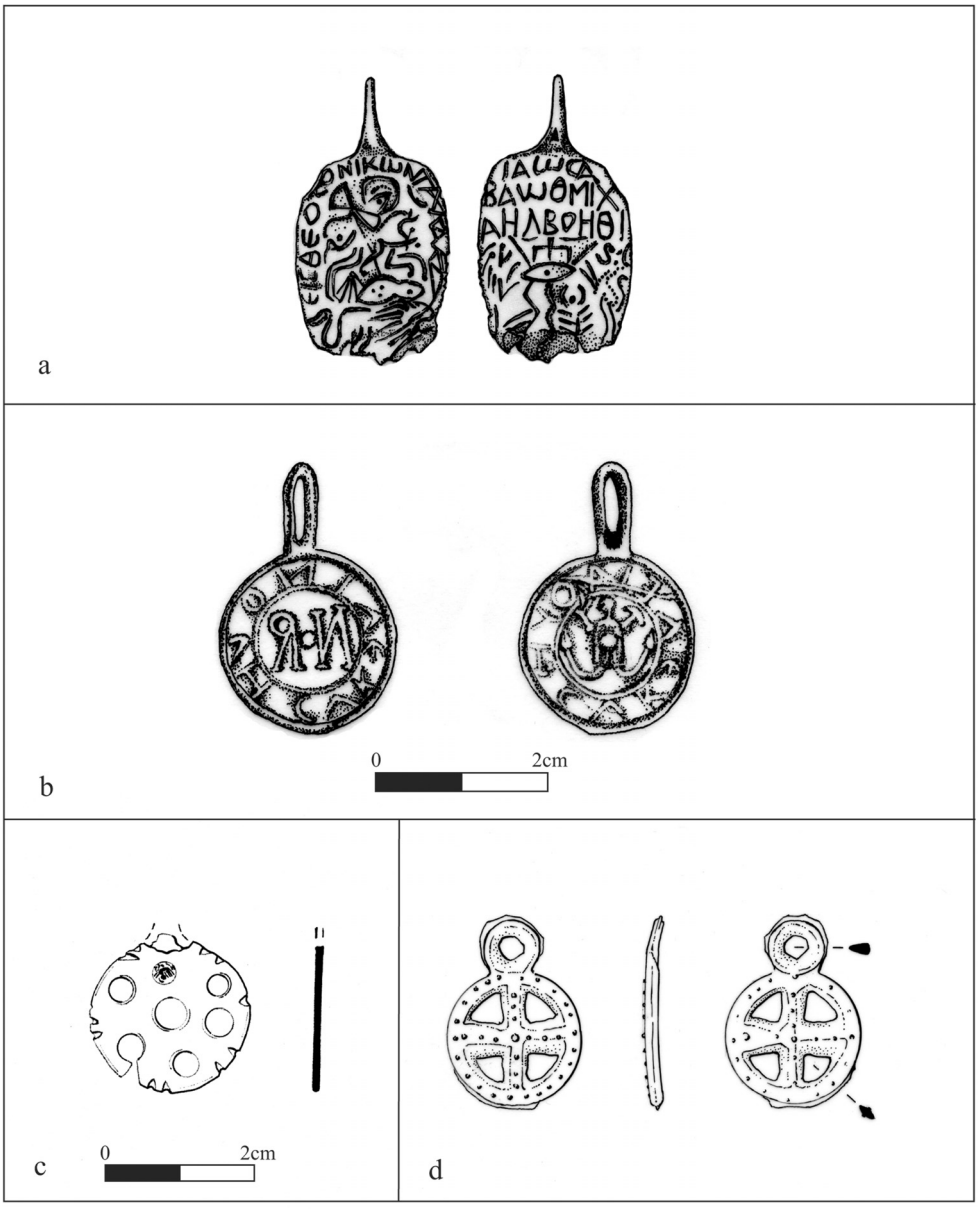

Fig. 10 a) Amulet with rider and the much-suffering eye, Tri-conch *domus* (Butrint Foundation). b) Amulet with figure of snaked-legged divinity, Tri-conch *domus* (Butrint Foundation). c) Circular copper disc perforated with six round holes and stamped with a bird (Butrint Foundation). d) Openwork lead pendant with a cross inscribed within a disc (Butrint Foundation).

(fig. 10c). The broken stubs of a little loop at one point on its circumference suggest that it was designed for suspension. Directly beneath the suspension-loop is the tiny stamped impression of a bird, possibly a dove, with extended wings, its head towards the centre of the disc and its feet to the edge—that is, the bird is set so that it would appear the right way up to a wearer looking down to inspect it on a chain about the neck. The display face is smoothly finished, while the reverse is lightly scored, possibly to ensure the adhesion of a back-plate of a different material in a contrasting colour. This pendant could of course be purely ornamental, but the presence of the bird suggests that it may have carried a symbolic meaning, possibly soteriological, possibly betokening affection. It was found in the early 5th c. northern range of the peristyle (Room 14), in topsoil containing material from Late Antiquity through to the Middle Ages.

Another amulet, carrying overtly Christian symbolism, was found with early-to-mid-5th c. pottery in an early 5th c. room (Room 29) on the western side of the *domus*. This is a small circular lead pendant, with an open-work cross inscribed within a circling band. The display face is embellished with close-set pearled dimples (fig. 10d). This is the cross in a halo of light, the theophanic apparition of the bejewelled cross in the sky, associated with the mystic apparition of the Godhead and the second coming of Christ, and represented in many contexts in Late Antiquity.[35] This type of pendant is known from excavations in the cemetery at the fortress of Dalmaces in central Albania,[36] and from Phoenice just to the north of Butrint;[37] an almost identical example has been found in a 7th c. context at Sagalassos, in southern Turkey,[38] and later versions of the type have been found at Corinth.[39]

Related to this in its imagery is a small copper-alloy buckle with an attachment plate fashioned in the form of a cross, from a 5th–6th c. demolition deposit in the Merchant's House immediately to the west

[35] Kantorowicz (1944) 227; Dinkler (1964) 50; Van der Meer and Mohrmann (1958) figs. 468–71.
[36] Spahiu (1971) pl. VII, 7.
[37] Budina (1971) pl. X, 1.
[38] Sagalassos: inv. no. SA-2000–B3–063. This was illustrated by Marc Waelkens in a lecture in the Late Antique Archaeology Conference in the Ashmolean Museum, Oxford, in May 2004. The pendant was found in a room flanking the early 5th c. A.D. basilica, in a destruction layer containing 5th–7th c. pottery, possibly to be associated with the earthquake of A.D. 640; M. Waelkens (pers. comm.).
[39] Davidson (1952) 259, pl. 111, nos. 2087–92.

of the *domus* (fig. 11a). Variants of this type of buckle have been found at Corinth.[40] The sense of these crosses must be generally apotropaic; above all else the cross was considered the most powerful and efficacious protective talisman in the early Christian world.[41]

Finger rings are another category of artefact which regularly carries protective imagery. Two examples were found in the *domus*. One of these, from the late 6th c. fill of an infant's grave in one of the abandoned rooms in the southern range of the peristyle (Room 21), bears some indecipherable characters set in a cruciform configuration, apparently in imitation of late antique 'Byzantine' rings with cruciform monograms, possibly used here with a protective sense (fig. 11b).[42] A second ring, from an early 6th c. demolition tip in the long south gallery (Room 18) has a cruciform anchor on its square bezel (fig. 11c). This device was a soteriological and apotropaic sign, combining the cross with the old symbol for hope, widely used in Christian communities in the Late Roman world.[43]

Finally, from the early 5th c. construction levels of the eastern walk of the peristyle, there is a bone plaque, carved in intaglio with a magnificent hunting dog, with trailing leash, leaping over a large eye (fig. 11d).[44] The hunting dog, of course, is another creature with strong symbolic associations, much favoured in the Late Roman period, often deployed to denote status, power and control of the environment. This is the hound which hunts down his quarry on mosaics, and on silver, glass and terracotta vessels, either accompanying his master represented on horseback alongside, or else hunting alone, shadowing in image the lord of the house as he receives his clients and friends at home, or invites them to eat with him off his finest table ware.[45] The idea behind the plaque is similar to that expressed on the two-faced copper

[40] Davidson (1952) 275, pl. 115, no. 2240; Werner 1955; Štefanovičová (1980) fig. I, 3.

[41] See n. 15.

[42] For Early Byzantine finger rings with monograms, see Chadour and Joppien (1985) nos. 138–47. Similar rings have been found in Albania, at Aarapaj; Hidri (1987) pl. VIII.4.

[43] For similar rings of the period engraved with cruciform anchors, see Dalton (1912) 4, n. 22; 5, n. 23; Deloche (1900) 82–83, n. 72; Baldini Lippolis (1999) 209, no. 2.vii.3.3a.15 (from Su Bruncu e S'Olia, prov. Cagliari, Sardinia). The *locus classicus* for the anchor as a Christian symbol for hope in salvation is St. Paul's *Hebrews* 6.19.

[44] Hodges (2006) 120.

[45] Toynbee (1962) pls. 161, 178–79; Weitzmann (1979) 63–64, cat. nos. 74, 77, 79, 80; Henig (1995) figs. 85, 87, 96; Ling (1998) 65, 93.

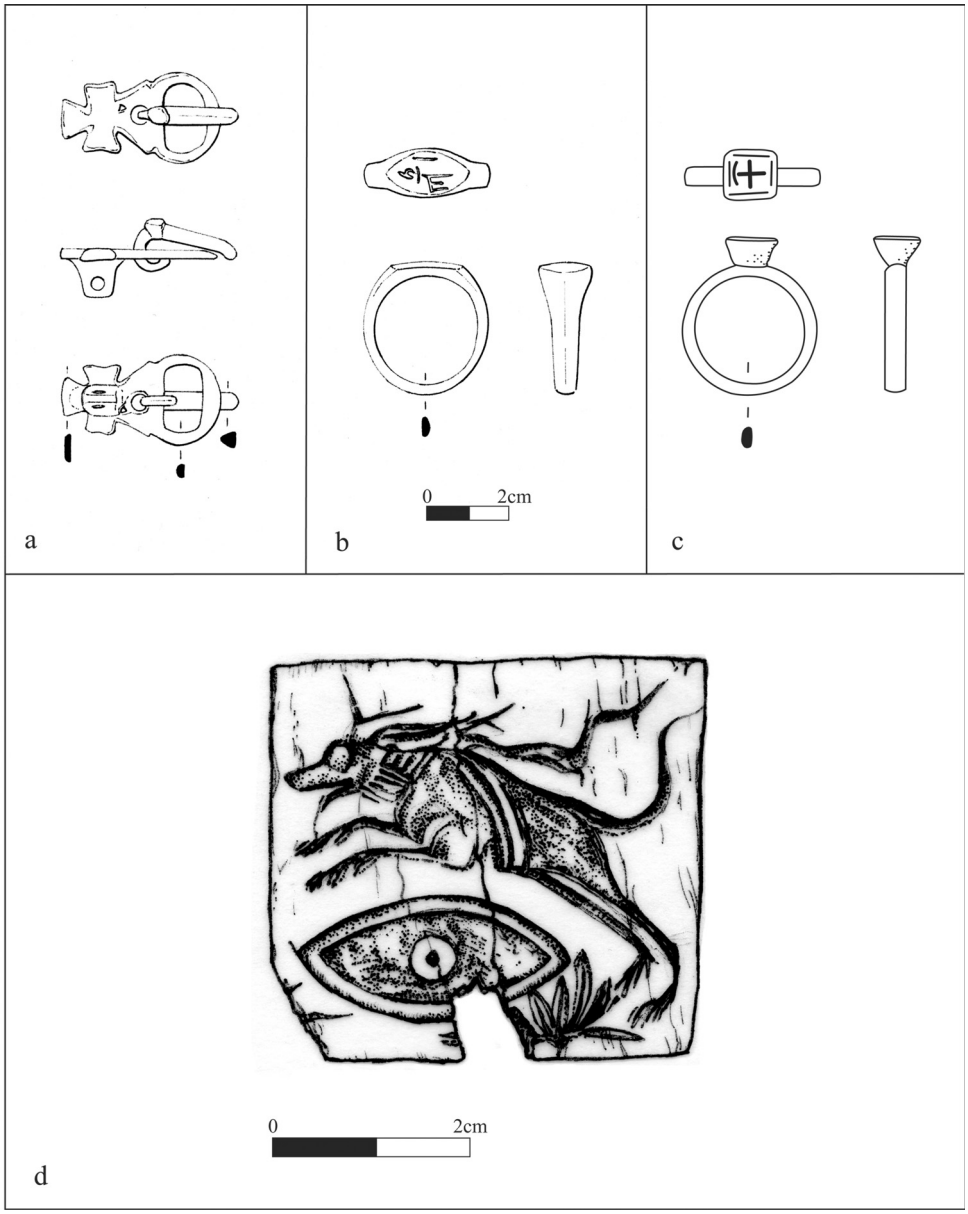

Fig. 11 a) Small copper-alloy buckle with attachment plate in the form of a cross (Butrint Foundation). b) Ring with indecipherable characters on its bezel (Butrint Foundation). c) Ring with cruciform anchor (Butrint Foundation). d) Bone plaque with hunting dog leaping over eye (Butrint Foundation).

amulet with the holy rider and the eye assailed; here the hound leaps over and brings to bay the dangerous eye.

Unfortunately, it is not possible to pin down precisely when these artefacts were worn and used and finally abandoned. The archaeological record rarely allows us to determine such matters with exactitude. However, it is clear that these amulets and portable protective devices were carried and lost by the people who used or visited the *domus* between the later 4th and the 6th c. Some may have belonged to the owners of the house or their dependents; however, this can only be said with certainty for the bone plaque with the hunting dog leaping the eye, which must pre-date the early 5th c. construction of the last and grandest phase of the house. All the other pieces come from deposits which post-date the abandonment of the *domus* as an elite residence. A few may be residual leftovers from earlier periods, but most are likely to have belonged to the successive groups which used or passed through the ruined fabric of the *domus* in the century or so following the mid-5th c., when the long gallery and the rooms in the southern range began to be used for light industrial operations and were adapted for various kinds of secondary occupation.[46]

The extended assemblage confirms something that is known from many other sources, that overtly Christian apotropaic symbols, like the cross and the *Chi Rho*, were used alongside devices which derived their power from the syncretic world of late antique demonology and superstition. As G. Vikan has said, with reference to amulets designed specifically to effect medical cures:

> […] in early Byzantium's world of miraculous healing […] the possessed did not indulge in the luxury of subtle differentiations. If need be, he called on Christ, Salomon and Chnoubis in one breath; this is the truth that our objects reveal with incontrovertible clarity. They reveal a world thoroughly and openly committed to supernatural healing, and one wherein, for the sake of health, Christianity and sorcery had been forced into open partnership.[47]

Beyond that, as Russell reminds us, it should be remembered that these devices are very much things of everyday life, of a time when "magic […] was no abstract belief or perversion of religion practised

[46] Bowden, Hodges and Lako (2002) 207–208; Bowden, Hodges and Lako (forthcoming); Bowden and Mitchell (2007).

[47] Vikan (1984) 86; see also Engemann (1975).

in secret, but was as commonplace a function of daily living as any activity represented among the small finds [of an excavation]",[48] and when "the measures taken to cope with the unseen menace of demons constituted a domestic activity as familiar as cooking, working, playing games or bringing up children".[49]

There has always been a temptation to see amulets and magic tokens as things used particularly by the uneducated and to think of fear of the Evil Eye as something especially prevalent among the lower strata of society.[50] Some of the pieces from Butrint must have been used by the people who set up house in the ruins of the complex after it had been abandoned by its patrician owners; but the eye and the other apotropaic devices in front of the entrance in the mosaic pavement of the west walk of the peristyle together with the stone grilles of the windows of the façade of the tri-conch, and the bone plaque with the dog leaping the eye, all relate to the *domus* in its hey-day, when it was one of the largest and most prominent houses of the late antique city. This would confirm that in superstitious beliefs and strategies little separated the educated elite from their poorer clients in the Late Roman world.[51]

Apotropaic Imagery at Antigoneia

A related phenomenon from the same period, at the old Hellenistic and Roman town of Antigoneia, some 30 km to the north-east of Butrint, can be considered in the light of this assemblage from the Tri-conch House. At Antigoneia, in the southernmost corner of the settlement, a small tri-conch church was excavated by D. Budina in 1974 (fig. 12).[52] This was a small building some 13.8 m overall in length, consisting of a tri-apsidal east end and a nave. A more or less complete mosaic pavement was laid in the sanctuary area, filling the northern and southern apses and the space between them (fig. 13).[53]

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[48] Russell (1982) 543.
[49] Russell (1995) 50.
[50] The shortcomings of this view have been effectively identified by Momigliano (1977) 156; Brown (1981) 12–22.
[51] Engemann (1975) 22–23.
[52] Budina (1976); Budina (1976–78); Duval and Chevalier (1999) 291, 301, fig. 8; Varalis (1999); Bowden (2003) 131–33, figs. 6.20–21; Mitchell (2006) figs. 1–2.
[53] Budina (1976–78); Dhamo (1981); Koch (1988) 130–32, 135, figs. 97–98; Dhamo (1994) 496–99; Dode (2004) 18–24, 122–31, fig. 2; Mitchell (2006) figs. 3–4.

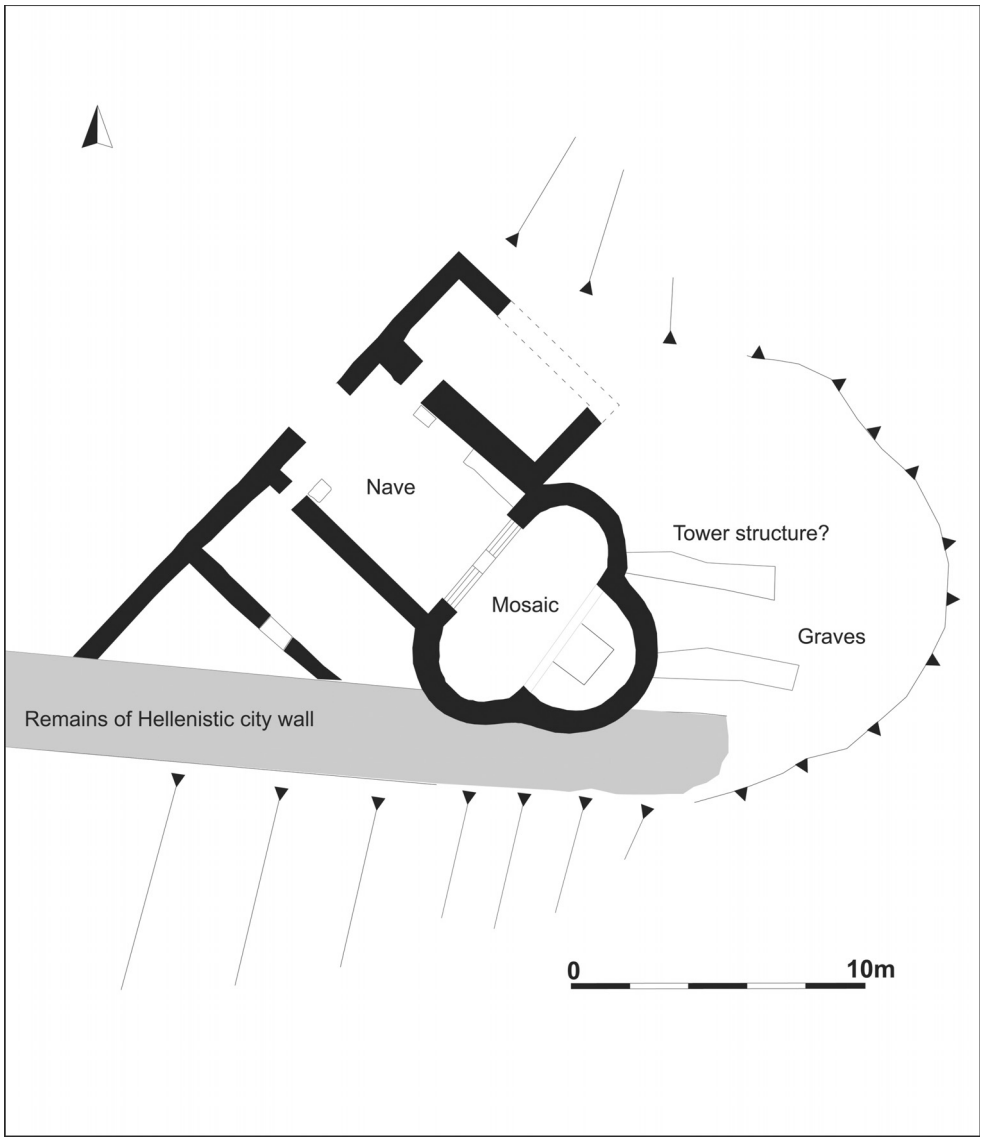

Fig. 12 Antigonea, Tri-conch church, plan (Butrint Foundation).

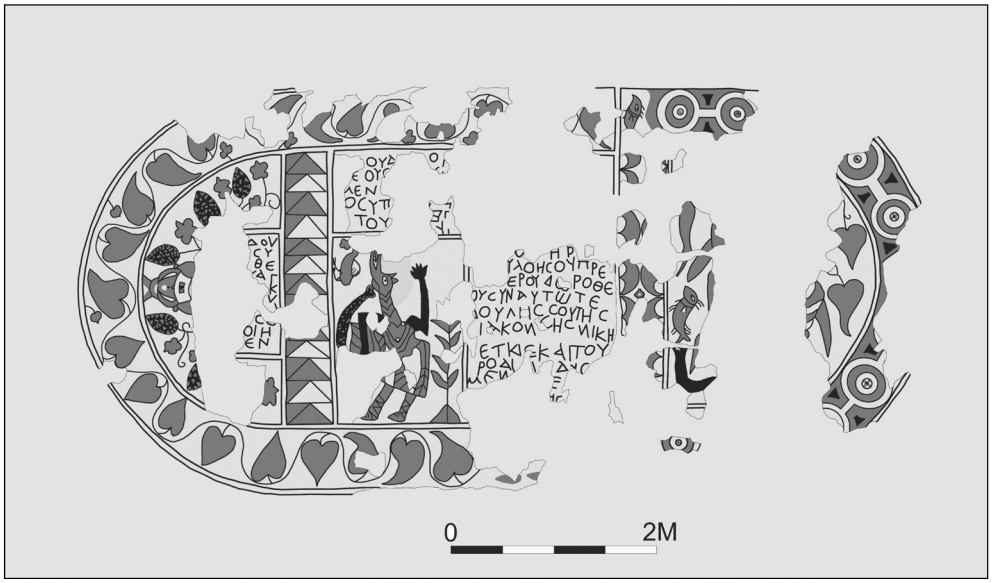

Fig. 13 Antigoneia, Tri-conch church, mosaic pavement (Butrint Foundation).

The function for which the building was designed is not known for certain. However, it seems likely that it was founded as a private commemorative church, which may also have served as a place of burial. This is suggested by the dedicatory inscriptions in the sanctuary mosaic, which commemorate a number of donors using conventional formulas, by the iconography of the pavement,[54] and possibly by the tri-apsidal form of the building.[55]

The programme of the mosaic pavement contains some rather unusual elements. In the left-hand northern apse there is a vine spreading symmetrically out from a large handled vase, a *kantharos*, to embrace an inscription, which reads: 'The slave of God, Agathokles, on account of a vow, made this' (whether the mosaic or the church itself is referred to here, is not clear) (fig. 13).[56] In the southern apse there is a marine-scape with a shoal of mixed fish of various sizes and shapes and a couple of ivy leaves.[57] The pavement of the *bema*, between these

[54] Varalis (1999) 201–202; Mitchell (2006).
[55] Varalis (1999) 207–13.
[56] Jordan (1995) 2; Dode (2004) 23, figs. 7–8; Mitchell (2006) fig. 5.
[57] Dode (2004) fig. 3; Mitchell (2006) fig. 6.

lateral apses, is divided into 4 rectangular panels, apparently arranged chiastically; two, diagonally opposed, carry inscriptions (figs. 24–25), the third a figural composition (fig. 26), and the fourth is now destroyed. The larger of these inscriptions reads: 'Through the care (*spoude*) of your slave, the presbyter Dorotheos, and that of his fellow-slave, the deaconess Nike, and also that of Alexandros, who has already gone to his rest, Lord, remember the slave who shared in the care (*spoude*)'.[58] The smaller inscription reads: 'The slave of God, Trygetos, having made a vow, paid (for the mosaic or church?), on behalf of himself and his household'.[59] And there is a third short inscription here, in the border just below the larger inscribed panel: 'For Andonios's payment for the *bema* for the sake of the slave (of God?) Philetos'.[60]

The various individuals named in the 4 inscriptions would appear to have been the people responsible for the construction of the church and for the laying of the pavement in the *bema*; Agathokles, who undertook work in fulfilment of a vow; Trygetos, who gave money for himself and his family; the presbyter Dorotheos, the deaconess Nike and a deceased colleague, Alexandros, who contributed their *spoude* to the enterprise; and Andonios, who paid for the *bema* on behalf of Philetos. The meaning of the word *spoude* is not clear. It could refer to any kind of supportive contribution to the work, including a gift of money.[61]

The composition in the lower left panel of this central area is dominated by an extraordinary creature, a hybrid figure with a human body and the head of a bird or beast, which stretches up its long scrawny neck, lifting its head and opening its long curving jaws to bare sharp teeth (fig. 14).[62] Two projections at the back of its head could be taken for ears or a cocks-comb. The figure holds one powerful and sinuous arm up, the other down against the body. It wears a cloak around its shoulders, pinned by three small, round disc-brooches below the neck; the cloak hangs down behind the body, framing it in three dramatic passages. Two prominent white legs emerge from this, with feet wearing sandals with high cross-lacing. On the left a great black snake, speckled red, arches up to seize the gullet of the standing creature. To the left of

[58] Jordan (1995) 3–4; Dode (2004) 21–22, fig. 5; Mitchell (2006) fig. 7.
[59] Jordan (1995) 3; Dode (2004) 22, fig. 6; Mitchell (2006) fig. 8.
[60] Jordan (1995) 2, n. 2; Dode (2004) 22, fig. 5; Mitchell (2006) fig. 7.
[61] Jordan (1995) 4–5; Bowden (2003) 131–32; Dode (2004) 125.
[62] Koch (1988) fig. 97; Dode (2004) fig. 4; Mitchell (2006) fig. 9.

Fig. 14 Antigoneia, Tri-conch church, *bema*, panel with anthropomorphic soteriological demon (Institute of Monuments, Tirana).

the beast's head there is a small bird with a flower in its beak, and to the right is a prominent plant or tree, probably representing a palm.

What is the subject of this panel and who is its extraordinary protagonist? D. Dhamo has proposed that this is the dog-headed St. Christopher, now known in imagery from the period on the remarkable terracotta plaques from Vinica in Macedonia.[63] However, the dogs represented in contemporary mosaics from Epirus do not look

[63] Dhamo (1981) 155–57. For the terracotta plaques with St. Christopher from Vinica, which have been dated to the 5th–6th c. A.D., see Dimitrova (1992–93); Balabanov and Krstevski (1993) pl. 2; Krstevski (2005) 20.

much like this figure.[64] D. Jordan, on the other hand, has identified the anthropomorphic beast as bird-headed, probably cock-headed, and connected it with the divinity Abrasax.[65] Abrasax, also called Iao, and identified with the Jewish God Jahweh, was a personification of good, of saving power, who engaged in mortal combat with the powers of evil, here embodied in the serpent.[66] In his usual form, Abrasax is an alectorocephalous anguipede, cock-headed and serpent-legged. His torso and arms are human, he wears a cuirass and a short military skirt, one of his arms is raised, brandishing a whip, and on the other he carries a round shield. He was venerated widely in the late antique world (and appears commonly on amuletic gemstones) as a power which was able to ward off both the Evil Eye and other demonic forces.

It is likely that Jordan is near the mark. This does seem to be a salvific being, with the power to combat and overcome the powers of evil and then to lead the individuals commemorated in the inscriptions through death to an everlasting life beyond. The closest parallels on gemstones are variant images of the psychopomp Hermanubis, usually shown with a dog's head, but on occasion with the head of a cock, or of some other sharp-beaked bird, and regularly grasping a large leafy palm branch, a sign of victory, regeneration and life (fig. 15).[67] The long sharp beak-like jaws may possibly have migrated from the ibis-headed moon god Thoth, who also figures on amulets of the period as a facilitator and symbol of regeneration and life after death.[68]

It is likely that this anthropomorphic figure is represented in the *bema* as a spirit of this kind, a powerful guide and guardian of souls, engaged in combat with the powers of evil. The tree (probably intended as a palm), and the little bird support the main figure, signifying eventual victory over the forces of darkness and death, and the subsequent peace and bliss of paradise. The subject may have been designed especially for

[64] The hunting dogs represented in the roughly contemporary mosaic pavement of the baptistery at Butrint have very different heads; see Mitchell (2004) fig. 11.12.

[65] Jordan (1995) 8–9.

[66] Bonner (1950) 123–39; Barb (1957); Henig (1984) 182.

[67] An good instance of a cock-headed Hermanubis is a red-green jasper in the Egyptian Museum at Berlin-Charlottenberg, on which the figure holds a large palm branch in one hand and a purse in the other; Philipp (1986) 96, n. 146. A variant on this which more closely resembles the creature at Antigoneia is a creature on a gem in the Cabinet des Médailles in Paris (no. Z 2152) with the head of long-beaked bird, holding a long palm-branch in one hand and extending the other over an altar; Delatte and Derchain (1964) 41–42, n. 41.

[68] Michel (2001b) 33; cat nos. 52–55.

Fig. 15 Roman-period gemstone of Hermanubis, Paris Cabinet des Médailles (drawing, Butrint Foundation, after Delatte and Derchain 1964).

this church and should probably be understood in a commemorative, possibly funerary, context, complementing the accompanying inscriptions, as an effective visual device for ensuring the safe passage of the named individuals to paradise.

The imagery in the northern and southern apses, in a more straightforward Christian sacramental idiom, carries a related meaning: to the north the spreading vine, which issues from a *kantharos* and embraces the inscription which commemorates the individual responsible for constructing the building or laying the mosaic, refers to the eucharist as a way to eternal life, through participation in Christ's death.[69] In the opposite apse, the marine scene can be understood as representing both the sea of sin from which Christians as fish are hauled out to salvation, and also the living water, which is the Word of God and the water of baptism, which similarly leads to eternal life.[70]

In this sense, this is a thoroughly apotropaic programme, which in the context of what was probably a private church combines common Christian themes together with a far more unusual subject drawn from the soteriological imagery of the worlds of Egyptian, Jewish and Roman belief. It testifies to the same trust in the effective advocacy of the powers and gods of the syncretic pantheon of the eastern Mediterranean world, alongside the Christian god, as that apparent in the mosaics, the window grilles and the apotropaic pendants from the Tri-conch House at Butrint, and it was conceived in the same period, to judge from its motifs and style, around the middle of the 6th c. A.D.[71]

Conclusion

To judge from the archaeological evidence, the preoccupation with amulets and with protective amuletic imagery of the kind discussed in this paper was a phenomenon of the later Roman period. At Butrint it is first encountered in the later 4th c. A.D. in the mosaic pavement of the peristyle of the *domus* and is attested more widely in artefacts deposited in the 5th and 6th c. The absence of devices of this kind from earlier phases of occupation on the site of the *domus* or elsewhere

[69] Maguire, Maguire and Duncan-Flowers (1989) 23–24.
[70] Drewer (1981) 534, 542–46.
[71] For the dating of this mosaic, see Mitchell (2006) 266–67.

in the city is striking. Why the practice of deploying apotropaic imagery of this kind, both on the person and in the public areas of buildings to the view of a wider audience, should have developed in the later 4th c. is a question which needs to be addressed—although the experience and knowledge to undertake this in depth lies outside the competence of the writer. The answer will be complex, as the recourse to protective devices and amulets is likely to have been one symptom of a fundamental transformation in mentality, in the way in which people understood and managed their existence in this life and their prospects after death. The issues underlying this change were probably in part metaphysical, in part social and practical.

On the one hand, these figures can be seen as one of the most striking material outcomes of a society which saw the sub-lunar world as abounding with gods, with spirits, good and bad, with angels and demons, which mediated between the earth and the superior spheres and which at any moment were likely to intervene in the everyday lives of humans.[72] On the other, they might be seen as a response to the social forces which threatened the lives of individuals in the period: the increasing demands of taxation and the polarisation of wealth and power in society in the western part of the empire;[73] the ubiquitous authority of the Church, which by the 5th c. had become the dominant institution in society, increasingly controlling the lives and the economic circumstances of citizens and demanding uniform and exclusive observance of a single God, tolerating no deviation or variance; the social and psychological tensions and the real physical disruption and dangers caused by the movements of migrating peoples, breaking through the old frontiers and harrying and settling in the old imperial provinces;[74] and in the latter part of the period, sharp urban decline. Major ecclesiastical construction stopped after A.D. 550 and cities like Butrint were soon in free-fall, with building activity now consisting largely of simple post-build structures and mercantile activity falling off sharply. By the mid-7th c. the old towns of the region, Butrint, Onchesmos (Saranda), Phoenice, and Kassiope, had ceased to function as urban centres, and

[72] Dodds (1970) 37–38; Gager (1992) 12; Flint (1999).
[73] Jones (1964) 1038–53; Jones (1966) 154–80, 362–70; Brown (1971) 34–44; Ellis (1988) 573–76; Cameron (1993) 94–101.
[74] Jones (1964) 1027–31; Cameron (1993) 33–56; Ward-Perkins (2005).

economic activity at the principal city of the province, Nikopolis, had dwindled to a trickle.[75]

The amulets and protective devices and imagery deployed by the users of the Tri-conch House at Butrint and by the patrons of the little tri-apsidal chapel at Antigoneia may be seen as a response to these circumstances. They formed part of a widespread strategy adopted by the populations of the Mediterranean world, as the structures of urban life changed and progressively broke down, to entrust their well-being, security and ultimate salvation to the supernatural powers and forces which had come to dominate their understanding of human existence.[76] At Butrint, it is of consequence that the majority of the small portable protective devices were found in contexts which date from the time when the Tri-conch House was no longer the residence of a single powerful family, secure in its social and economic standing; rather they were deposited in the later 5th and 6th c., when the house, increasingly ruinous, had undergone subdivision,[77] and was shared between groups and individuals whose lives and support systems were fragile and insecure. In an age of anxiety and vanishing skills and services individuals had to look to their own security and preservation.

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[75] Bowden (2003) 199.

[76] Brown (1971) 49–57.

[77] For the practice of secondary 'subdivision' in late peristyle residences in the Late Roman period, see Ellis (1988) 567–69.

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VESSELS IN CONTEXT

THE ARCHAEOLOGY OF LATE ANTIQUE DINING HABITS IN THE EASTERN MEDITERRANEAN: A PRELIMINARY STUDY OF THE EVIDENCE

Joanita Vroom

Abstract

This paper sets out to explore the relationship between excavated evidence of dining rooms and table utensils, and changing dining habits in Late Antiquity. In the first part the emphasis is on pictorial representations of dining scenes from the 5th and 6th c. A.D. The second part of the paper examines the archaeological evidence and its relationship to these scenes. On the basis of this evidence, it is not only possible to discuss in detail the architectural layout of the dining room together with its furniture and textiles, but also to give a description of the actual objects (in silver, metal, pottery, glass and in other materials) used on the dining table.

Introduction

In Late Antiquity the focus of the Roman empire was shifting eastwards, towards the new capital and administrative centre Constantinople, although ancient 'Roman' traditions remained strong. From the inauguration of Constantinople in A.D. 330 to the period of Iconoclasm (A.D. 726–843), the Byzantine elite continued to use their meals in special designed dining rooms, in a manner derived from the Greeks and Romans. In this paper I will present a preliminary analysis of the archaeological evidence for table utensils which can be associated with the architectural setting of late antique dining rooms in the eastern Mediterranean. In the first part of this paper I will discuss a selection of pictorial representations of dining scenes—both secular and religious—from the 5th and 6th c. A.D. I aim to establish what kind of dining furniture and table utensils these pictures show, and also to note the kind of utensils *not* represented in pictorial scenes.

In the second part of the paper I will concentrate on archaeological evidence from the late 4th/5th to the 8th c. A.D. that seems to have a clear relationship to the discussed pictures. I will discuss the architectural

L. Lavan, E. Swift, and T. Putzeys (edd.) *Objects in Context, Objects in Use* (Late Antique Archaeology 5 – 2007) (Leiden 2007), pp. 313–361

layout of the dining room together with its furniture and textiles. In addition, I will focus my attention on the actual objects used on and around the dining table, such as silver and other metal table wares, pottery, glass, and cutlery. The majority of the material discussed originates from excavations in the eastern Mediterranean, although I will also include a few finds from Italy. In short, the emphasis will not be on food, recipes in cookbooks, or the evidence of surviving food remains, but rather on a reconstruction of late antique table settings in the so-called stibadium style through archaeological evidence. It is not my intention in any way to aim at completeness in this study, but rather to establish whether the approach chosen here is fruitful in explaining dining habits and changes in dining habits during the late antique period. I will also where appropriate bring in written texts to underline my arguments.

Considerations of space preclude a detailed discussion of all the complex problems related to the historical context of the late antique world. Nor do I include here a wider consideration of the socio-cultural context of dining in antiquity. However, there are couple of points that must be raised preliminary to the main enquiry. Firstly, it must be noted that the literary—as well as the pictorial—evidence is biased towards the wealthy upper classes, and that we are mostly looking at lifestyles and dining customs of a small elite in Late Antiquity. Secondly, we must be especially cautious in dealing with the pictorial evidence, since it consists of a difficult mix of different sources of evidence. Some of the depictions, for example, are of contemporary secular scenes, while others show mythological or biblical scenes. Can all be accorded the same weight?[1] Combining information obtained from archaeology (artefacts made in silver, metal, pottery, glass and in other materials) and textual sources with the critical evaluation of representations of material culture in late antique images may prove to be a fruitful way forward. It may allow relevant conjectures to be made concerning both the accuracy of pictorial representations, and changes and developments in dining habits over time.

[1] See Vroom (2003) 303–304 and Maria Parani's contribution in this volume on the problems and possibilities in using Byzantine pictorial evidence.

Pictures from Late Antiquity (*ca.* 5th–7th c.)

The iconography of Roman dining scenes reached its peak in the late 3rd and 4th c., as is shown in K. Dunbabin's recent book *The Roman Banquet*.[2] According to Dunbabin, towards the end of the 4th c. the semi-circular *stibadium*-couch or cushion replaced the previous ancient *triclinium* arrangement of three dining couches around a single central table. Between the 2nd and early 4th c. representations of dining scenes and picnics on a *stibadium*-cushion or couch were popular themes in funerary contexts, depicted, for example, in many catacomb paintings and on sarcophagi lids. We also see these representations in a secular context such as on miniatures, ivories, mosaics and silver plates. According to Dunbabin, around the turn of the 4th to 5th c. images of diners in a funerary context seem to disappear and those in a secular context also became rarer.[3]

From the 5th c. onwards 4 main groups of dining scenes in a *stibadium*-style exist. Firstly, those in a mythological setting, for example, a miniature from the *Codex Vergilii Romanus* at the Vatican Library in Rome, which is roughly dated to the 5th c. (fig. 1.1);[4] secondly, biblical banquets, such as the miniature of King Herod's Feast from the *Codex Sinopensis*, a luxury manuscript of the 6th c. (fig. 1.2);[5] thirdly, representations of aristocratic country picnics, for instance a (rather vague) miniature (late 5th–beginning of 6th c.) from the so-called Codex of the Ambrosian Iliad at Milan (fig. 1.3);[6] and finally, representations of the Last Supper of Christ and the Apostles, exemplified by an image from a 5th c. ivory diptych in the cathedral treasure of Milan (fig. 1.4).[7]

On all these pictures we can distinguish, in general, diners reclining on a high, semi-circular couch or behind a curving bolster while eating together in a typical aristocratic banquet-style amidst luxurious-looking cushions, hangings, and embroidered tablecloths. We must keep in mind, of course, that different furniture or utensils might have been

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[2] Dunbabin (2003) 141–87.
[3] Dunbabin (2003) 191.
[4] Dölger (1943) 543–44; Weitzmann (1979) 227–28.
[5] Dölger (1943) pl. 320.1; see also Dunbabin (2003) fig. 118; Vroom (2003) 306, fig. 11.5.
[6] Bianchi Bandinelli (1955) 69, figs. 66, 191.
[7] Dobbert (1891) 183, fig. 18; Volbach (1976) 84–85, pl. 63 with further literature on the diptych; see also Vroom (2003) 307–27; Vroom (forthcoming) with more examples of Last Supper scenes in the East.

Fig. 1.1 Miniature of 'Dido's Feast', Bibl. Vaticana *lat. 3867* (fol. 100v), Biblioteca Apostolica Vaticana, Rome, probably late 5th c. A.D. After *Picturae* (1902) min. XIII.

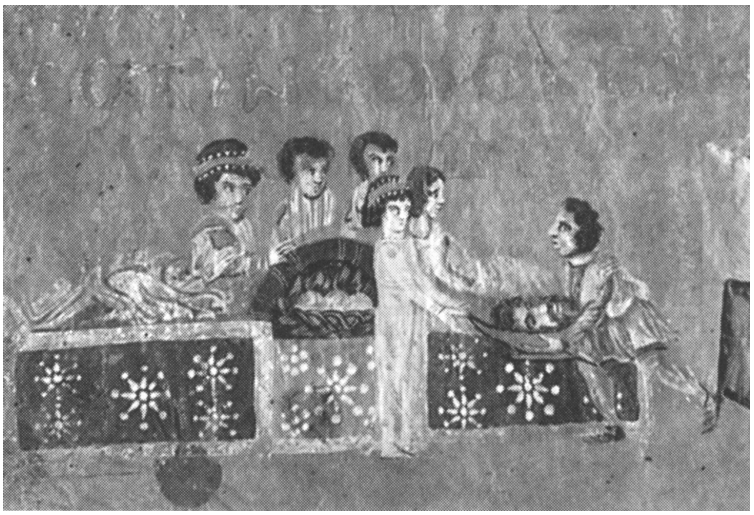

Fig. 1.2 Miniature of 'Herod's Feast', Codex Sinopensis, Bibliothèque Nationale *Suppl. Gr. 1286* (fol. 10v), Paris, 6th c. A.D. After Dölger (1943) pl. 320.1.

Fig. 1.3 Miniature XXX of 'Feasting Trojans', Ilias Ambrosiana Codex 1019 of the Ambrosian Iliad, book VIII (fol. 27b), Libreria Ambrosiana, Milan, late 5th–early 6th c. A.D. After Bianchi Bandinelli (1955) 69, figs. 66 and 191.

Fig. 1.4 Ivory diptych of the Last Supper, Tesoro del Duomo, Milan, 5th c. A.D. After Dobbert (1891) fig. 18.

used on different types of dining occasion, and that therefore the dining scenes shown are not necessarily wholly accurate. The couch has a crescent cushion or bolster on the front, and stands around a small, round table with slender decorated legs or a semi-circular *sigma*-table. At the centre of the table we can see a flat, wide-open dish or plate with a broad flat base and curved walls, with food inside. Around this dish one can often discern round, cross-marked bread rolls, or in case of the *Codex Vergilii Romanus* miniature, three crescent-shaped bread rolls.[8] There are no knives, spoons, forks, or individual plates on the table. Sometimes the diners are holding drinking beakers or cups in their hands, but they seem to eat their food from the wide-open, central dish with their fingers. In front or around the back of the *stibadium*-couch or cushion one can distinguish attendants involved in the preparation of food and drink, serving wine in drinking beakers or cups to the diners from one-handled jugs with a narrow neck. Other servants are holding one-handled ewers, as well as broad bowls or water-basins. Both of these types of object were common in Late Antiquity for washing hands during dinner.

Archaeological Evidence in Late Antiquity

Dining Rooms

Having briefly described the pictorial evidence of dining scenes from the 5th c. onwards, I will now examine the archaeological evidence and its relationship to these scenes. Many dining rooms, designed for dining in the late antique *stibadium* fashion, were found and identified during excavations in Spain, Italy, Sicily, Croatia, Greece, Morocco, Tunisia, and

[8] Ellis (1997) and (2000) has argued that the crescent-shaped objects around the table are a misrepresentation of the 'cusps' (or decorative inlays) carved around the edge of some late antique marble tables. These table cusps can indeed be noticed in the miniature of 'Pharao's Meal' in Vienna (here fig. 2.4), as well as on an actual marble table from excavations in the Athenian Agora (here: fig. 3.3). However, Dunbabin (2003) chapt. 5, nn. 57, 79, pls. XIII–XIV identifies the ones represented on the surface of late antique tables as crescent rolls (of bread or of a type of cake?), as is shown in a mid 4th c. painting from the Tomb of Banquet at Constanza and in a late 4th c. mosaic from the Tomb of Mnemosyne at Antioch. Furthermore, two crescent-shaped rolls also appear (as a standard motif?) on the surface of a decorated tablecloth in the 6th c. Last Supper scene in the Rossano Gospels; see also Dunbabin (2003) chapt. 6, n. 75, fig. 119.

Turkey.[9] The existence of apsidal tri-conch rooms is known in several elite houses of Late Antiquity, as shown in the two dining halls in the Villa of Piazza Armerina in Sicily.[10] In the grandest social circles, there were even multi-conch rooms which allowed the *stibadia*-couches to be aligned in rows on either side and at the far end. The Great Palace of the Emperors in Constantinople, for instance, contained a hall known as the Triclinium of the Nineteen couches (the *Decaenneacubita*).[11] In this dining hall the placement of the guests was organised in several small apses on *stibadia*-couches giving room for a greater number of people, all facing the central area. The hall was used as late as the 10th c. for state banquets, as Liutprand of Cremona, a western visitor to the Byzantine court in Constantinople, recorded during this period (*ca.* A.D. 922–72) in his account of a reclining banquet for the Emperor and his guests.[12]

Not only wealthy villas and Imperial palaces but also private houses had late antique dining rooms in the *stibadium*-style. In Greece, for example, a number of urban villas of the late 4th to 6th c., each with an apse-like dining room, have been excavated in Thessaloniki, Athens, Amphissa, Thebes, Megalopolis, and Argos.[13] Furthermore, in Delphi in central Greece, three dining rooms of the 5th–6th c. have just recently been found.[14] The dining rooms in these houses were often luxurious, decorated with multi-coloured mosaic floors as well as wall-paintings, and generally had space for 7 or 8 guests, showing dining in a more intimate arrangement for a small selected group.[15] The possibility of upper floor dining should also be taken into account in these private dwellings, especially in bishops' residences, as is recently shown by B. Polci's article on the transferral of reception halls and banqueting chambers to the upper storey in late antique and Early Medieval houses.[16]

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[9] See, in general, Bek (1983); Sodini (1984) 375, nn.62–69; Dunbabin (1991) 128–35; Dunbabin (1996) 77–78; Ellis (1997).

[10] Lavin (1962); Bek (1983) fig. 7 dining halls 5 and 7; Dunbabin (1991); Dunbabin (1996); Nielsen (1998) fig. 8 dining halls 5 and 7.

[11] According to Bek (1983) and Nielsen (1998), the Triclinium of the Nineteen Couches is dining hall 10 in their figs. 9. However, according to J. Bardill (pers. comm.) dining hall 10 is a multi-conch dining hall of a private palace near the Great Palace.

[12] Liutprand, *Antapodosis* VI.8 (*Mon. Hist. Germ.* III (1839) 338).

[13] See, e.g., Åkerström-Hougen (1974); Sodini (1984) 375–83; Karidas (1996).

[14] Petridis (1997) 687.

[15] Marquardt (1886) I 307; according to Ellis (1997) 40 the mosaics show that each diner had only 50 to 75 cm of space next to the table.

[16] Polci (2003) 89–106.

The best examples of such tri-conch reception rooms on the upper floor can be seen in Syria; for instance, at Il Medjdel and at Bostra.[17]

Dining Furniture

The archaeological evidence shows that late antique dining rooms were furnished with semi-circular reclining couches of the *stibadium*-type, which were placed in the apses or niches of the dining hall. In the early 5th c. 'Tri-conch Palace' of Butrint in southern Albania, for instance, it seems as if the foundations for a permanent masonry *stibadium*-couch are still visible in one of the three smaller apses of the banquet room (fig. 2.1–2).[18]

At Apamea in Syria, two houses have been excavated which were not only characterised by the presence of apsidal dining rooms with similar masonry couches (including masonry bolsters) but also yielded marble *sigma*-shaped tables (figs. 2.3 and 3.1–2).[19] One such table was a huge slab of green marble, still in place in the centre of the room above the calcined remains of its wooden base; the other table was a smaller slab of white marble. The tables were moveable, but very heavy and would require several men to shift.[20] Also in Greece, a similar marble semi-circular table was found in the Omega House in Athens, as well as in Corinth and in Stobi (fig. 3.3).[21]

Apart from these large marble tables, another older type of dining table continued to be used together with the *stibadium*-couch. This table was quite small (at most a metre in diameter), certainly in relation to the couches which offered space to several persons, and was mostly round in shape. A complete example can be seen from excavations, and also depicted on wall paintings at Pompeii in Italy.[22] Furthermore, furniture

[17] Ellis (2000) 91–93; Polci (2003) 101, figs. 7–8.

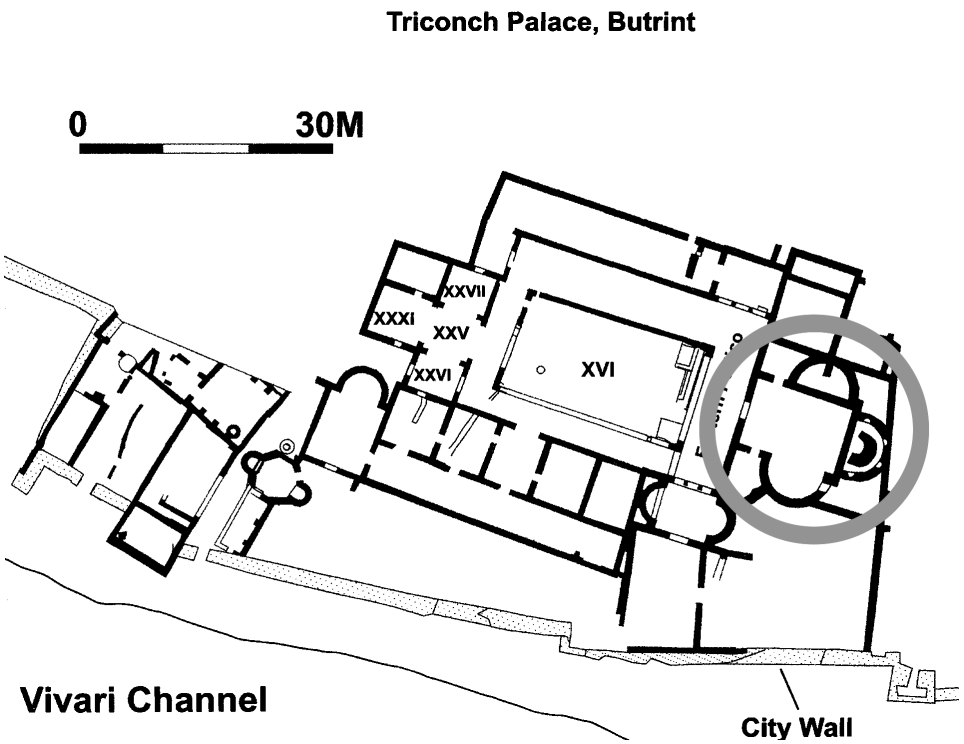
[18] Bowden, Hodges and Lako (2002) 208. According to Baldini Lippolis (2001) 79–83, permanent stone *stibadium*-coaches have also been found on sites in North Africa and in Dacia.

[19] Balty (1984) figs. 6, 9, pl. LII 1–2; see also Marquardt (1886) I 309, n. 4.

[20] Dunbabin (2003) 194, n. 63.

[21] Camp (1986) 211, fig. 185; see also Åkerström-Hougen (1974) 105–106, fig. 63, nn. 90–94; Baldini Lippolis (2001) 79–83; Sodini (1984) 383, n. 91 for more examples of stone or marble tables found in various parts of the Mediterranean. According to W. Bowden and J. Mitchell (pers. comm.), one fragment of a stone *stibadium* table was recently found at the excavations in Butrint.

[22] Marquardt (1886) I 308, n. 5; Blanc and Nercessian (1992) 65, fig. 75; see also Bradley (1998) 48–50 on the dining table in written sources.



Figs. 2.1–2 Masonry *stibadium*-couch in dining room, 'Tri-conch Palace', Butrint, Albania, early 5th c. A.D. Map after Bowden, Hodges and Lako (2002) fig. 6; photo author.

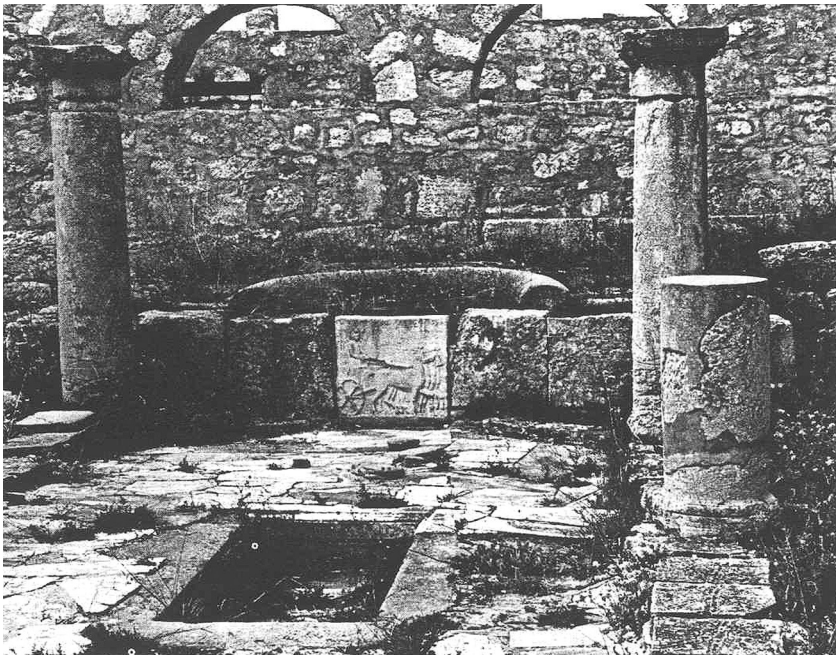
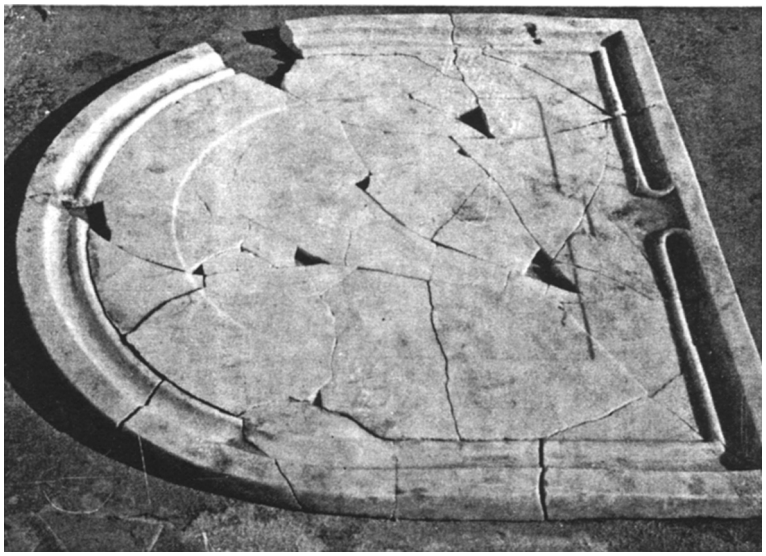
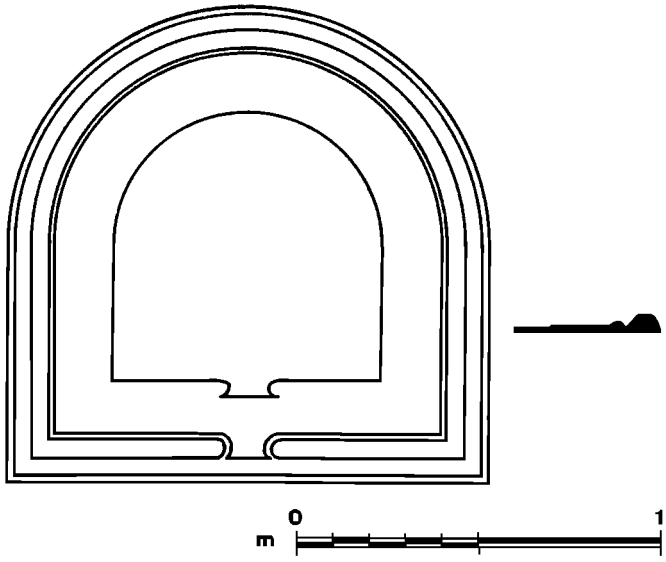


Fig. 2.3 Masonry *stibadium*-couch and bolster in dining room, House of Hesychius, Apamea, Syria, 5th to 6th c. A.D. After Balty (1984) fig. 9.

Fig. 2.4 Miniature of 'Pharaoh's Meal', Nat. Libr. *Theol. Graec. 31* (fol. XVII, 34), Vienna, probably 1st half of 6th c. A.D. After Von Hartel and Wickhoff (1895) pls. A and XXXIV.





Figs. 3.1–2 *Sigma*-shaped marble tables, House of the Stag, Apamea, Syria, 5th to 6th c. A.D. After Balty (1984) fig. 6 and pl. LII.

supports or table legs of similar round tables, made of stone, are often found during excavations in the Mediterranean, such as the marble table leg depicting the shape of a lion (mid 2nd–early 3rd c.) from the excavations at Sardis in Turkey.[23]

In Late Antiquity the *stibadium*-couch, adorned with a decorated bolster on the inside, became the setting for formal and luxurious banquets, both in and outdoors. According to the written sources, one element of the protocol was that diners reclined to eat, which was a mark of high status, with their left arm supported on a bolster, taking food from a serving table with the right hand.[24] The diners were placed in a hierarchical order: the guest of honour sat in a special place, usually in the right corner (*in dextro cornu*) and the host or second important figure of the banquet in the left corner (*in sinistro cornu*) of the couch.[25]

The actual shape and size of a *stibadium*-couch can be seen in a 6th c. miniature of the 'Pharaoh's Meal' in the so-called *Vienna Genesis* (fig. 2.4).[26] This is the only picture in which one can distinguish the *stibadium*-couch from the side and back, showing its structure and the way the guests position themselves on the couch. Its shape is that of a half circle sofa on several banister-like legs, with a decorated bolster on its front. The rest of the dining room in this picture is left clear for the service of food, as well as for entertainment. Noteworthy are also the so-called 'cusps' (decoration inlays) painted around the edge of the depicted table in the *Vienna Genesis* miniature, because these cusps were indeed carved in the surface of a real marble table from excavations in the Athenian Agora (fig. 3.3).[27]

Dining rooms with apses designed for holding a *stibadium*-couch and a semi-circular table can also be identified by the layout of the mosaics.[28] Sometimes the room itself was laid out in the semi-circular shape of a *stibadium*-couch, as shown in the 3rd c. mosaic from the House of the Buffet Supper in Daphne, near Antioch (fig. 4.1).[29] In other cases one

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[23] Crawford (1990) fig. 580.

[24] See, e.g., Marquardt (1886) I 307–309; Rodenwaldt, *RE* 2A (1923), s.v. *sigma*, 2323–24; see also Åkerström-Hougen (1974) 103, nn. 82–85.

[25] Engemann (1982); Bek (1983); Bradley (1998).

[26] Von Hartel and Wickhoff (1895) pls. A, XXXIV; see also Dölger (1943) 572–73; Vroom (2003) fig. 11.9.

[27] See also the discussion on the danger of interpreting these cusps in all depicted tables in n. 8.

[28] See Sodini (1984) 375–83; Balty (1984) figs. 10–12; Dunbabin (1991) 128–29 with more examples.

[29] Levi (1947) 127, pls. XXIIIa, XXIVa–b; see also Åkerström-Hougen (1974) 101, fig. 58; Balty (1984) fig. 10.

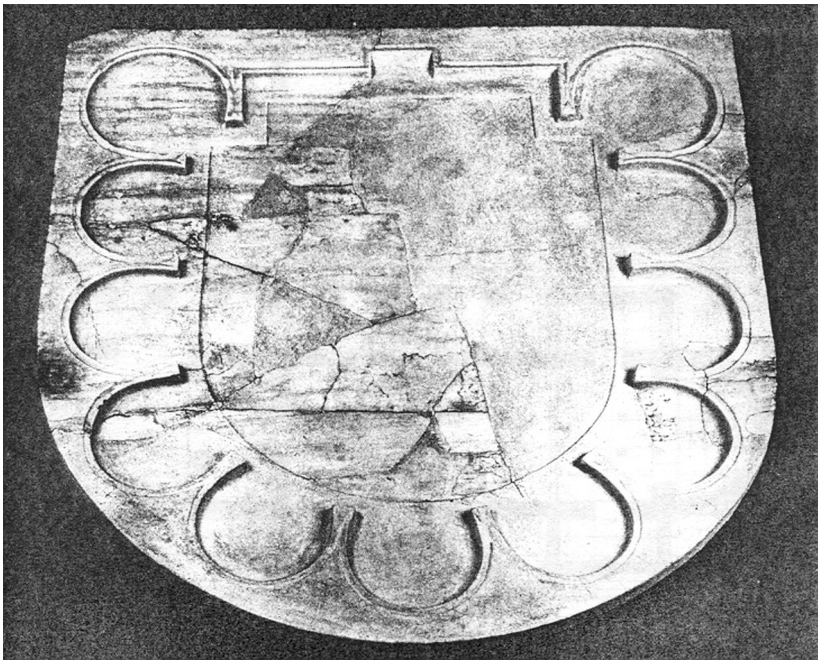


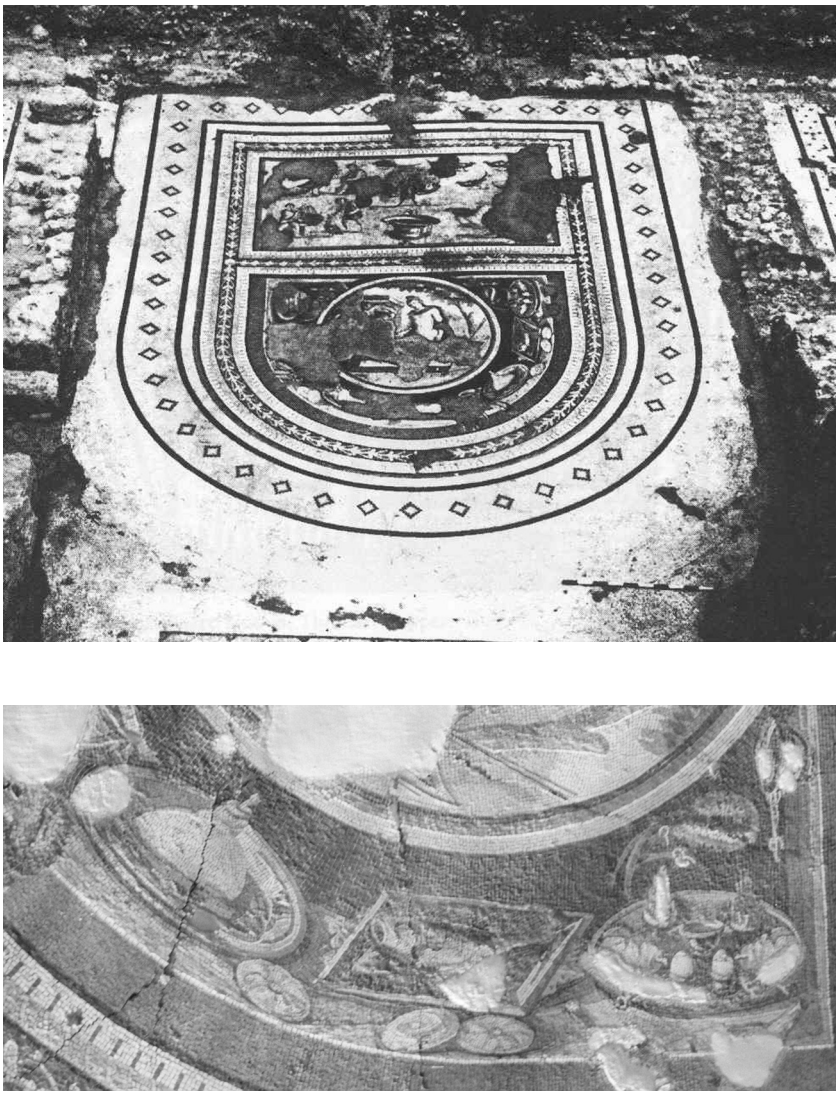
Fig. 3.3 *Sigma*-shaped marble table, Omega House, Athenian Agora, Athens, Greece, 6th c. A.D. After Camp (1986) fig. 185.

can observe a rectangular dining room in the house, such as the dining room of the Villa of the Falconer in Argos, where the design of the mosaic not only marks the semi-circular type of a *stibadium* but also gives the layout for the 7 individual wedge-shaped segments into which the *stibadium*-couch was divided (figs. 4.3–4).[30] In the middle of the Argos mosaic the image of a semi-circular *sigma*-table is depicted, on which a centrally placed, oval-shaped dish with two fishes is visible.[31]

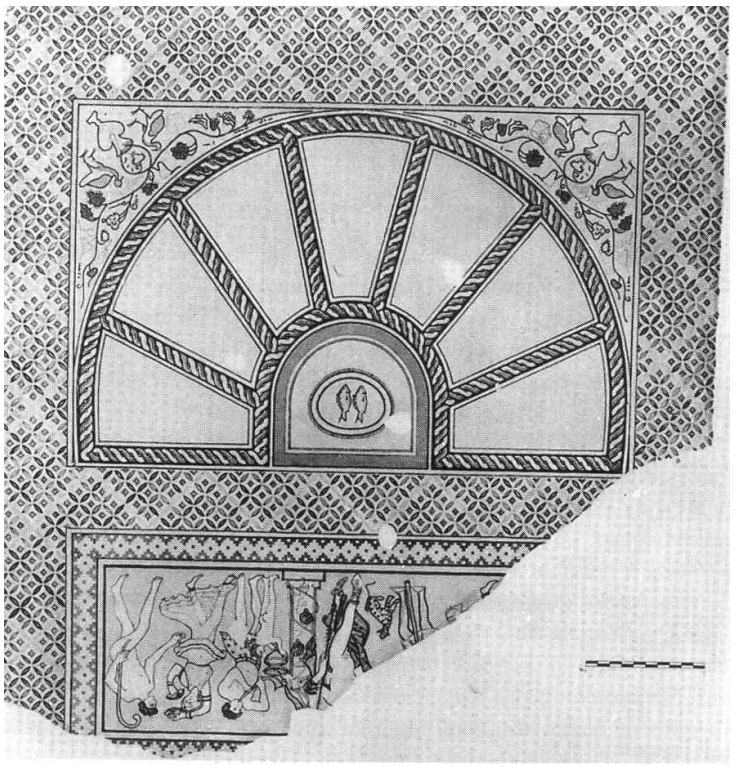
Dining Textiles

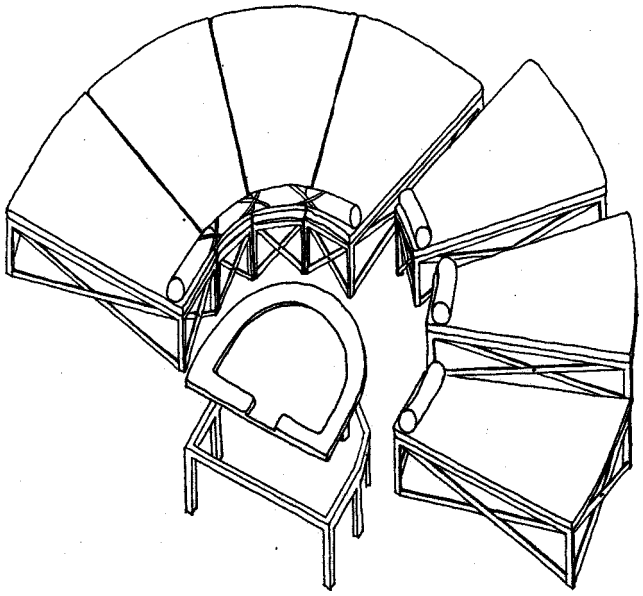
Unfortunately, we do not have any examples of *sigma*-shaped textile cushions or bolsters from excavated contexts, though there is a stone

[30] Åkerström-Hougen (1974) 101–10, figs. 61, 74, pl. VII; see also Balty (1984) figs. 12–13; Dunbabin (1991) 129; Dunbabin (1996) 74.
[31] Åkerström-Hougen (1974) 36, 101, pl. 7.2.



Figs. 4.1–2 Mosaic, House of the Buffet Supper, Archaeological Museum, Antakya, Turkey, probably early 3rd c. A.D. After Balty (1984) fig. 10; detail photo author.





Figs. 4.3–4 Mosaic, Villa of Falconer, Argos, Greece, probably early 6th c. A.D. After Åkerström-Hougen (1974) figs. 61, 74 and pl. VII.

semi-circular bolster on a masonry dining couch in Apamea (fig. 2.3).[32] Coptic textiles which were excavated in burial grounds in Egypt can give us some idea how furnishings may have been used in the late antique dining room. A rough estimation of the amount of fragments of Coptic textiles found varies from 20,000 to 100,000 pieces. Of these, most are fragments of garments or tunics, but large curtains, hangings and covers for altars, tables and mattresses have also been recovered. Although the survival of large textiles is rare, some curtains and other textile furnishings have been preserved in Egypt through their use as burial wrappings. A few linen curtains or hangings from Egypt of the 7th and 8th c., for instance, are now kept in the British Museum and the Victoria & Albert Museum.[33] They are decorated with classical designs in coloured wool. It has been suggested that these hangings would have been used as door-curtains or room dividers rather than as window-curtains, which has also been proven by archaeological evidence in Apamea. Contemporary depictions of curtains certainly show them hanging as if provided with loops or rings.

These large rectangular textiles often have the same types of decoration as those found on garments. In fact, it is sometimes difficult to distinguish between fragments of shawls, covers, or curtains. The most interesting form of decoration is the applied or embroidered medallion (or roundel) in wool or silk on a natural linen background, such as the 4th c. example with a geometric design from the Louvre Museum in Paris (fig. 5.2).[34] Several 6th c. wall mosaics from Sant' Apollinare Nuovo in Classe and from San Vitale in Ravenna show an applied medallion with a similar abstract design on covers for tables and altars (fig. 5.1).[35] In addition to geometric designs, dining scenes are also depicted in the embroidered designs of these applied medallions. A late 5th c. roundel from Antinoe, Egypt, (now kept in the Brooklyn Museum) shows an idyllic hunting or picnic scene with a group of diners reclining on the ground behind

[32] Crawford (1990) fig. 39. See also Marquardt (1886) I 310–11 on dining room textiles. There is a Roman relief of the 1st c. A.D., now in the Galleria Uffizi in Florence, showing the display and sale of cloth and textile cushions in a colonnade. On the relief one can distinguish square cushions or cloth with tassels, as well as long sashes hanging down.

[33] See, e.g., Kendrick (1922) 11, no. 627, pl. VII; Buckton (1994) 102–103, no. 112.

[34] Rutschowscaya (1997) 38 below.

[35] Deichmann (1995) figs. 314, 407; see also Marquardt (1886) I 312–13 for the use of tablecloths after Domitian in the written sources.

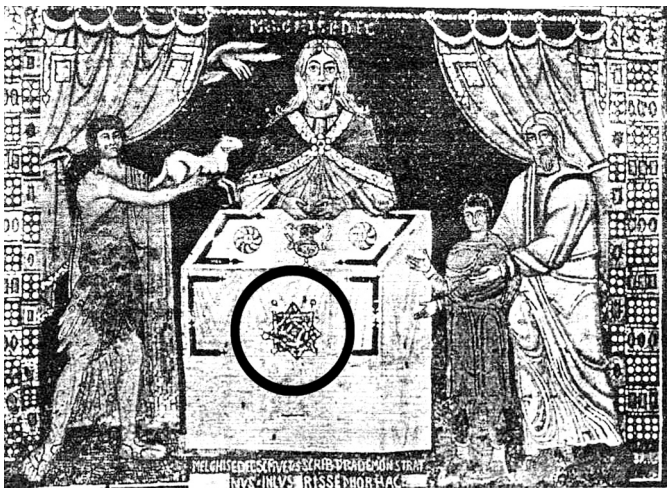


Fig. 5.1 Wall mosaic, Sant' Apollinare Nuovo in Classe, Italy. After Deichmann (1995) fig. 407.

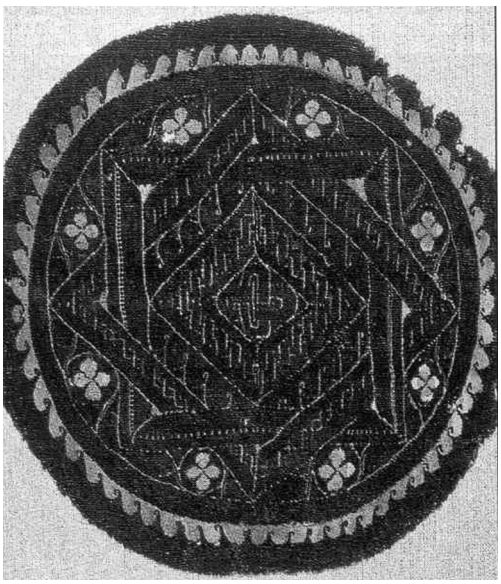


Fig. 5.2 Textile roundel, Louvre museum, Paris. After Rutschowscaya (1997) 38 below.

Fig. 5.3 Textile roundel of 'Hunter's Picnic', from Antinoe, Egypt, Brooklyn Museum of Art, New York. After Bianchi Bandinelli (1955) fig. 196.

a *stibadium*-cushion (fig. 5.3).[36] A part of a 7th/8th c. roundel of linen embroidered with coloured silks, from Egypt, is particularly interesting (fig. 5.4).[37] This fragment represents the Last Supper, with Jesus and the Apostles sitting at a semi-circular *sigma*-table. In the centre is a large dish with food, surrounded by round bread rolls marked with a cross for each diner. Below, on the right of the roundel, is a servant carrying a jug on

[36] See, e.g., Bianchi Bandinelli (1955) fig. 196; Blanc and Nercessian (1992) 110, fig. 139. According to Baldini Lippolis (2001) 85–86, large textiles with decorated scenes of the Dionysiac cycle also were used for the dining room.

[37] Kendrick (1922) 57–58, no. 778, pl. XVI.

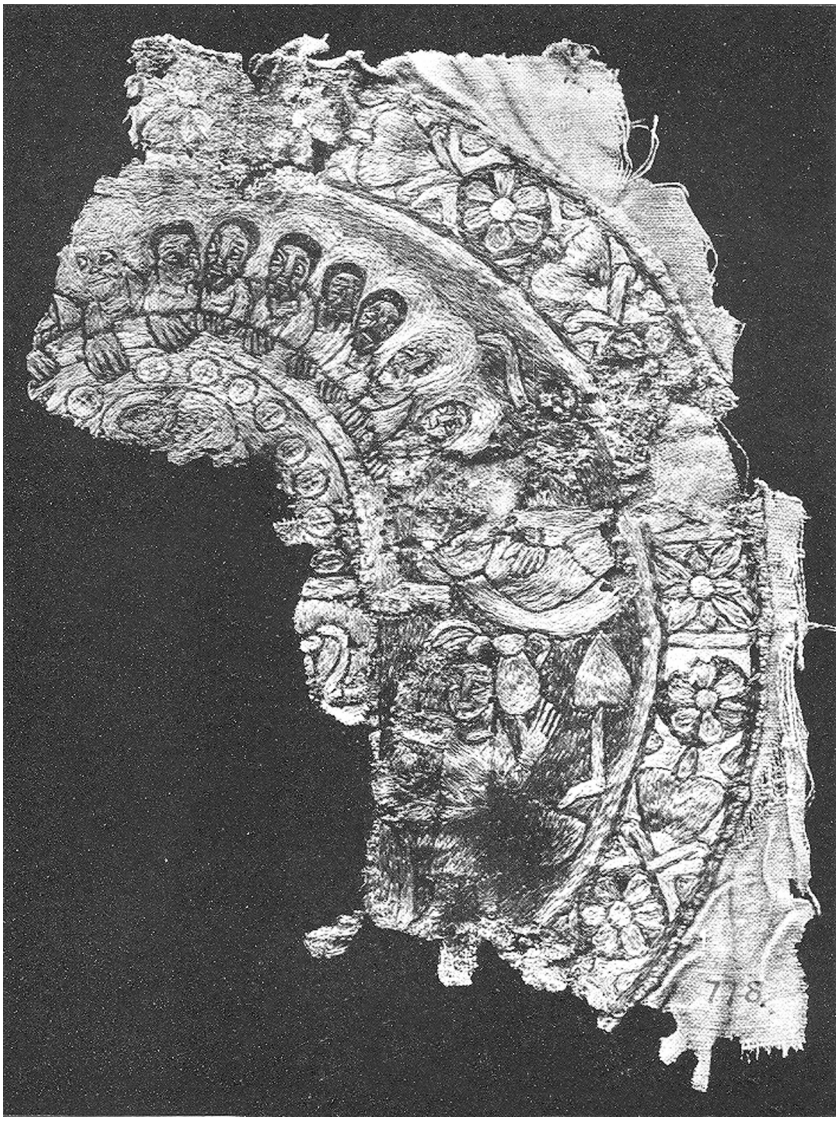


Fig. 5.4 Textile roundel of Last Supper, Victoria & Albert Museum, London. After Kendrick (1922) 57–58, no. 778, pl. XVI.

the shoulder. The written sources also mention napkins, made of textile. It was, for instance, essential for the guests to bring their own napkins (so-called *mappae*) and to know how to use them.[38]

Silver Table Ware

A large number of late antique hoards from the late 4th and 5th c. give a clear picture of the silver vessels used in this period. It must be remembered that a fair amount of this late antique silver must have survived for many generations and remained in use for a long time before burial.[39] Several important late antique hoards have been found in the western provinces: for example, at Kaiseraugst near Basel in Switzerland (dating to the end of the 4th c.); at Traprain Law in lowland Scotland (early 5th c.); and in England, at Mildenhall, Suffolk (*ca.* mid 4th c.), and at Water Newton, Cambridgeshire (4th c.).[40] In the Mediterranean, on the other hand, Syria, Turkey, North Africa, and Cyprus have yielded interesting silver finds.[41]

Among the shapes of domestic plate in these hoards one can discern shallow goblets, one-handled jugs, flasks without a handle, saucepans and handled *paterae*, small ladles with straight handles, and spoons with a pear-shaped bowl, as well as plates and dishes which range in diameter from *ca.* 45 to 60 cm.[42] These plates usually stand on a higher but smaller base. Silver was particularly used for plates and dishes, rather than other items within the dinner-service. In most late antique silverware assemblages, highly decorated drinking cups (which are so typical of earlier Roman assemblages) have nearly disappeared or are confined to a few simple pieces. Instead, the bulk of the silver assemblages of the 4th/5th to 7th c. A.D. consists of open vessels, above all of large serving plates, platters and trays (which must have nearly filled the centre of the small dining tables), often decorated with a central monogram or medallion in relief, engraving or inlay.[43]

A fine example of an elaborate decorated central medallion can be seen, for instance, on the Hunting Plate from the Sevso treasure (figs.

[38] Marquardt (1886) I 313–14; Bradley (1998) 39.
[39] Strong (1966) 183; see also Leader-Newby (2004).
[40] Strong (1966) 182.
[41] Milburn (1988) 251–64; Mundell Mango in Buckton (1994) 14.
[42] Strong (1966) 187–204.
[43] Dunbabin (2003) 161, n. 64.

6.1–2).[44] This hoard consists of 14 silver vessels found buried in a copper cauldron. These vessels include 4 big plates, 5 jugs or ewers, a basin, an amphora, two buckets and a casket for toilet items. In her study of the treasure, M. Mundell Mango has concluded that the vessels were probably made in various parts of the Roman Empire between around A.D. 350–450.[45] The strategic location of ancient wear and repairs documents their utilitarian use in the past. The Hunting Plate of the mid-late 4th c. is one of the 4 large plates in this hoard, 70.5 cm in diameter, and with a central medallion including the scene of a picnic. Beneath an awning spread between two trees, 5 figures recline against a curving bolster on the ground. The small round table in front of the bolster holds a centrally placed plate with a fish. Servants below bring more food and drink to the diners, and other vessels and containers stand in front.

A close parallel to the Hunting Plate in iconography, technique and date is the so-called Cesena plate from northern Italy (now in the Biblioteca Malatestiana, Cesena), which is a silver gilt plate inlaid with niello.[46] It has an almost identical central medallion with picnic scene, including 5 guests reclining on the ground against a semi-circular bolster around a round table, served by a servant at either side. According to Dunbabin, it is difficult to tell whether these very highly decorated silver plates were actually used to serve food or were designed purely for display, to be exhibited on a special stand or table (the so-called *abacus*) for the guests' admiration.[47] However, the pictorial evidence shows us objects in use that are comparable in size if not necessarily in decoration.

The display of food on silver dishes can be seen on a 3rd c. mosaic from the House of the Buffet Supper in Daphne (fig. 4.2).[48] The semi-circular mosaic is decorated with a succession of different silver vessels bearing food which are depicted in the order of a luxurious meal (*cena*). First there is a starter, such as the large silver dish with boiled eggs, artichokes, and legs of pork, served with a pair of small spoons and a bowl

[44] Mundell Mango (1990); Mundell Mango and Bennett (1994) 55–97; see also Dunbabin (2003) 142–44, fig. 84, colour pl. VIII; Leader-Newby (2004) 7–8, fig. I.1.

[45] Mundell Mango in Mundell Mango and Bennett (1994).

[46] See, e.g., Bianchi Bandinelli (1955) fig. 195; Blanc and Nercessian (1992) 66, fig. 78; Dunbabin (1996) 76, fig. 13; Dunbabin (2003) 144–46, fig. 85.

[47] Dunbabin (2003) 162; see also Marquardt (1886) I 319.

[48] Levi (1947) 127, pls. XXIIIa, XXIVa–b; see also Åkerström-Hougen (1974) 101, fig. 58; Balty (1984) fig. 10; Knudsen (2000) 182, fig. 1; Dunbabin (2003) 159–61, figs. 93–94.

Figs. 6.1–2 Hunting plate, Sevso Treasure, Northampton, mid- to late 4th c. A.D. After Mundell Mango and Bennet (1994).

of red sauce. Then dishes with a large fish, an entire ham, fowl and a dessert are depicted, which would have been served in sequence.

Non-precious Metal Table Ware

During Late Antiquity the use of non-precious metal is fairly widespread for a variety of objects found in both domestic and ecclesiastic contexts. Domestic metal ware included basins, ewers, flasks, pans, lamps, censers and various cooking vessels such as cauldrons made of bronze, copper and copper-alloy, lead, and iron.[49] Iron was usually us ed for candlesticks, but it is unclear to what extent bronze utensils penetrated the average household. Many copper metal objects were excavated in the Byzantine shops of Sardis in Turkey, mainly in 7th c. contexts. These include some copper and copper-alloy jugs/ewers or flasks, which may have been used to serve and hold liquids such as wine or water.[50]

Perhaps these jugs were once used together with a so-called *patera*, a vessel resembling a concave bowl with a handle, which was used in pagan libations and later adapted to the ceremony of hand-washing during or after dinner.[51] A bronze example from the 4th c., found in Rome, has incised decoration inside the bowl depicting the head of Ocean surrounded by scenes with a marine theme.[52] Together with a jug or ewer, the basin was used as a vessel to catch the water below the diner's hands. The few examples of *paterae* that survive are usually made in bronze or copper-alloy, and may well come from Africa and Egypt. However, there are also fine examples in silver, for instance a *patera* of about A.D. 400 from Carthage or Alexandria, now in the British Museum. This flat and broad *patera* with horizontal handle has an aquatic decoration, in similar vein to the marine theme above; this time a large frog in relief in the centre of the bowl.[53]

[49] See, for instance, Mundell Mango (2001) 90–92, figs. 5.2–7, 5.10–11 with further literature.

[50] Crawford (1990) figs. 213–14, 285, 522; see also Mundell Mango (2001) fig. 5.7 for finds of similar copper-metal jugs and flasks at Alassa, Cyprus, the Dor shipwreck and Istanbul. Mundell Mango (2001) 93 suggests there is uniformity and continuity in these copper-metal jugs and flasks, because early 7th c. types found in Sardis reappear between the 9th and 11th c. at Corinth and in Istanbul.

[51] Dölger (1943) 549–50; Hilgers (1969) 71–72; Buckton (1994) 52.

[52] *Crypta* (2000) 51 below; see also Dalton (1921) fig. 12 for another bronze *patera*.

[53] Buckton (1994) 52, no. 36 with further literature. See also Swift, this volume, on the relationship between decoration and function.

The combination of a *patera* and jug or ewer as washing implements often occurs in the foreground of depicted dining scenes, for instance, on the *Codex Vergilii Romanus* miniature (fig. 1.1) and on the Sevso hunting plate (figs. 6.1–2). On this last plate the jug has a distinctive thumb-hold on top of the handle, for serving and pouring liquid from the vessel. Similar jugs with thumb-holds, made in copper-alloy or in bronze, have been recovered from excavations in Europe and at the Plemmyrion shipwreck near Syracuse in Sicily—sometimes found together with a *patera*-type vessel.[54]

Decorated metal lamps, in contrast to the more common ceramic ones, were expensive lighting devices used both in ecclesiastical spaces and in homes.[55] Standing lamps (*candelabra*), for example, are visible behind the *stibadium*-couch in the background of the dining room on several Last Supper scenes of the 8th and 9th c., such as on the drawing (by Garrucci) of an 8th c. wall mosaic from the oratorium in S. Maria ad Praesepe (fig. 7.2);[56] or on a Last Supper miniature of the second half of the 9th c. in the Chuldov psalter, now in the Historical Museum in Moscow (fig. 7.3).[57] The lamps on both pictures undoubtedly indicate the late hour of the meal, but do not perhaps provide much light at the table.

Some metal lamps were hung from chains; others were designed to be supported from below, such as a bronze lamp on a bronze lamp stand (probably Egyptian) dating from the 6th or 7th c., now in the British Museum (fig. 7.1).[58] The lamp has a deep rounded body, a long nozzle, a very elaborate decorated double handle and a high, flaring base, within which is a square hole for the pricket of the stand. The lamp stand itself has a tripod foot of stylised lions' legs and on top a reel-shaped drip-tray.

Metal censers in the shape of small boxes, which were normally employed in the church service, have also been found in residential

[54] See, for instance, Mundell Mango (2001) figs. 5.5, 5.10.

[55] Less wealthy households would probably have used similar lamps made of earthenware.

[56] Garrucci (1873–81) 98–101, pls. 279–80; see also Dobbert (1891) fig. 20.

[57] Dobbert (1892) fig. 31; see also Vroom (2003) 314, figs. 11.10–13 for more examples of standing lamps behind dinner tables.

[58] Dalton (1921) fig. 9; Buckton (1994) 108–109, no. 119; see also Crawford (1990) figs. 284, 584–85 for excavated examples from Sardis; Mundell Mango (2001) figs. 5.2, 5.10 for similar finds from Matara and the Plemmyrion shipwreck near Syracuse.

Fig. 7.1 Bronze lamp, British Museum, London. After Dalton (1921) fig. 9.

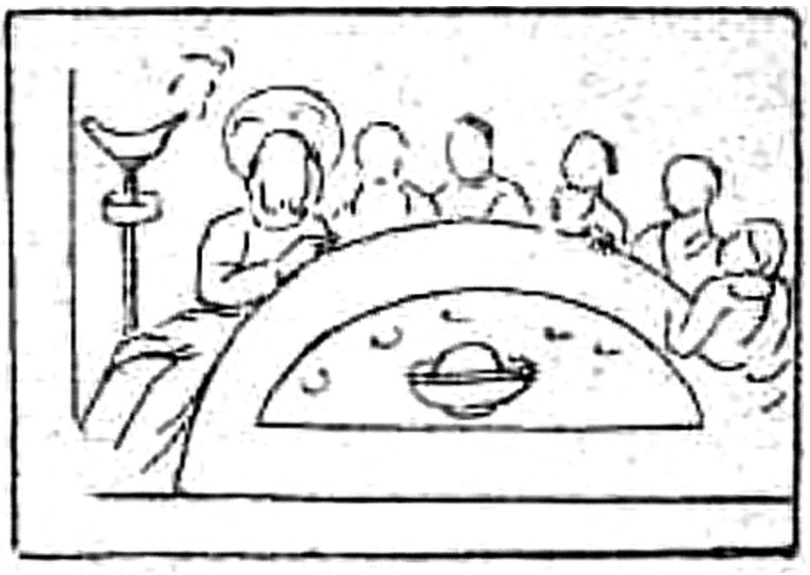


Fig. 7.2 Drawing of a 8th c. A.D. wall mosaic of the Last Supper, from the oratorium in the S. Maria ad Praesepe, Rome. After Garrucci (1873–81) 98–101, pls. 279–80.

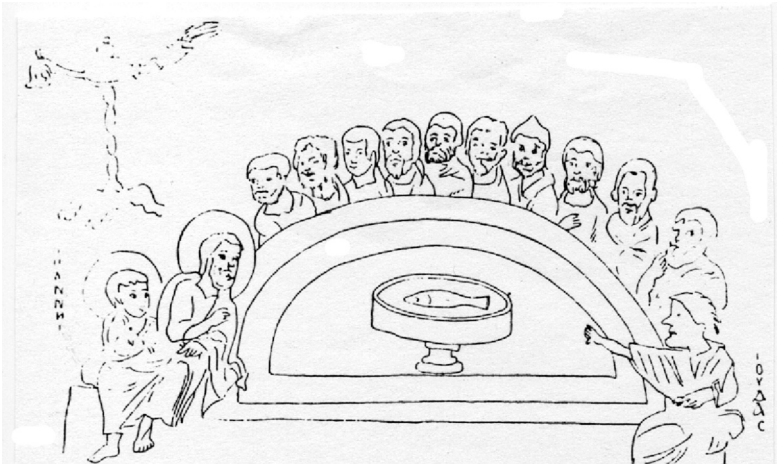


Fig. 7.3 Miniature of the Last Supper, Historical Museum *Add. gr. 129* Chuldov Ps., Moscow, 2nd half 9th c. A.D. After Dobbert (1892) fig. 31.

contexts, such as late antique shops or dining rooms.[59] This seems to imply that they were almost certainly used for secular purposes, perhaps deodorising the bad odour in a room with their pleasant smell. The secular use of incense is well attested in ancient texts dating to an earlier period; Columella, Celsus and Pliny the Elder all discuss different types of incense, among them the so-called '*styrax*' from Asia Minor.[60]

Representations of the *stibadium* banquet, e.g., a mosaic of the late 3rd c. from Sepphoris in Israel, show a prominent, exotic looking vessel next to the diners, prominently displayed on a stand with a servant behind it (fig. 8.1).[61] This is a so-called *authepsa*, or an ancient samovar, to provide hot water, which would be mixed with wine during dinner. Metal hot-water heaters have been found in archaeological contexts from the 1st to the 4th centuries, as is shown by excavated examples from Kayseri and Sardis in Turkey.[62] They are often elaborate and complex vessels, with internal compartments to hold the fuel and various mechanisms for drawing off the liquid and releasing steam. An *authepsa* of unalloyed copper from Sardis, for instance, has an ovoid body with tall neck and grill on the underside for hot coals, while within the vessel there is a tall tubular chimney (fig. 8.2). By the 3rd and 4th c., especially, hot-water heaters had become indispensable and valuable items, always shown in the representation of luxurious meals or picnics (e.g., the Sevso hunting plate and a mosaic from Piazza Armerina; see figs. 6.1–2 and 10.1).[63]

It is interesting to see this perpetuated in later times. Various miniatures from a Middle Byzantine manuscript of the 11th c. (now in Paris) show a hot-water heater placed as a functional artefact next to a dining Jesus and his guests (figs. 8.3–4).[64] In addition, a miniature of 'Job's children' from an 11th c. manuscript in St. Catherine's Monastery in Sinai also

[59] See, for instance, Crawford (1990) figs. 303–304, 339, 566; Mundell Mango (2001) fig. 5.10 for censers recovered from the Plemmyrion shipwreck in combination with other metal dining room items including lamps, a lamp stand and pitchers.

[60] Crawford (1990) 15, nn. 17–19 with further literature.

[61] Dunbabin (2003) colour pl. XII.

[62] Dunbabin (1993) 120–27, fig. 11 for Kayseri; Crawford (1990) figs. 281–82 for Sardis; see also Knudsen (2000) 186, no. 68; Mundell Mango (2001) fig. 5.6; Dunbabin (2003) 166–68.

[63] See also Dunbabin (1993) for more examples of hot-water heaters on pictures and in archaeological contexts.

[64] Bibliothèque Nationale *gr. 74* Tetraevang. (fols. 42, 61, 69, 82, 117, 133, 166–67), Paris; see Omont (1908).

Fig. 8.1 Mosaic, House of Orpheus, Sepphoris, Israel, *ca.* 2nd half 3rd c. A.D. After Dunbabin (2003) colour pl. XII.

Fig. 8.2 Ancient samovar or *authepsa* from Sardis, Turkey. After Crawford (1990) figs. 281–82.

Figs. 8.3–4 Miniatures, Bibliothèque Nationale *gr. 74* Tetraevang. (fols. 25 and 69), Paris. After Omont (1908).

shows a metal *authepsa* in front of the banquet scene.[65] These pictures show that the *authepsa* is always placed next to the dining table, and sometimes next to a chafing dish. Perhaps the *authepsa* and the chafing dish were used for warming meals and liquids in a society where separate kitchens were not widely used. The question remains whether we are dealing here with artistic models of a standard (late antique) motif, or whether these pictures indeed confirm the written sources that wine was still being mixed with hot water during Middle Byzantine times.[66]

Ceramic Table Ware

Of all the materials, ceramic is the best preserved in archaeological contexts, which means substantial quantities of it survive. I will restrict myself here to the shapes of table wares (especially open vessels), which were used for serving food and drink, and I will not discuss utilitarian domestic wares (such as cooking pots, mortaria, and amphorae). Pottery was considered in Late Antiquity to be of a lower quality than table ware of gold, silver, or glass. Rabbula, the 5th c. bishop of Edessa, for instance, is said to have ordered his clergy to dispose of their silver dishes for the benefit of the poor and replace them with ceramic ones.[67]

Ceramic tableware of the 4th to the 7th c. found in excavations all over the Mediterranean includes a variety of fine textured and thin-walled vessels finished with a smooth reddish slip on the inside and outside.[68] These Red Slip Wares were specifically intended for use on the dining-table and therefore the finish had to be of the best possible quality. However, both fabric and slip suggest that the vessels were not useful for very watery dishes or stews, for which glazing would be a much more suitable finish.

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[65] Miniature, St. Catherine's Monastery *gr. 3* (fol. 17v.), Sinai; see Weitzmann and Galavaris (1990) 37; Vroom (2003) 318, fig. 11.17.

[66] Kislinger (forthcoming). Recent research by B. Pitarakis (2005) has shown that copper hot-water heaters have been found in archaeological contexts of the 5th–7th c. and even until the 9th–10th c., as is shown by excavated examples from Turkey (Kayseri, Ephesus, Sardis, Amorium), from Italy (Taormina) and from Nubia (Ballana). In her conclusion Pitarakis also uses 9th–10th c. hagiographic sources to show that wine was still mixed with hot water in that period.

[67] Koukoules (1947–55) V 146, n. 5. See also Overbeeck (1865) 172, nn. 14–18; Blum (1969) 43.

[68] See, in general, Hayes (1972); Carandini (1981).

Late antique Red Slip Wares are almost all open vessels in shape, some with quite steep sides. They seem to have served as large bowls, dishes, and plates.[69] The ancient names appear to have been *patane*, *patella*, *patellion*, terms applicable to open bowls and cups.[70] The forms of table vessels changed in Late Antiquity: small plates for individual use became fewer, whereas large platters became more common. The rim diameters of open Red Slip vessels from northern Africa can be quite large, ranging from 29 cm to nearly half a metre. Calculations by J. Hawthorne on the mean vessel volume and the calibrated sherds volume of African Red Slip Ware show how the average vessel volume of African Red Slip Ware dishes increased during Late Roman times.[71]

It has been suggested that this increase in the size of these open vessels reflects a change in eating habits in Late Antiquity: from small, individual-sized bowls to large communal dishes.[72] It has even been argued by some scholars that the shape change can be related to the rise of Early Christianity in Africa, with the adoption of communal dining seen as a reaction to the individual dining of pagan Rome.[73] For the early Christians, meals were supposed to be communal and simple, with a 'minimum of material trappings'.[74] However, other scholars suggest that the potters merely imitated vessels made in more expensive materials such as silver and glass, thus implying a broadening of the repertoire of forms in pottery, rather than a change in eating habits.[75]

Wall mosaics in the basilicas of San Apollinare Nuovo and San Vitale in Ravenna (dating to the 6th c.) seem to depict these large dishes (figs. 9.1–2).[76] The dishes have a broad flat base with curved wall. The shape of the dishes looks quite similar to contemporary forms of Late Roman Red Slip Ware, such as forms 61 to 64 of Hayes type series of

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[69] Of course, closed forms did exist in Red Slip Wares, but mostly in early forms of the Roman period; see Hayes (1972) pls. II–X.

[70] Poll., *Onom.* VI.85, 90; X.107–108; Koukoules (1947–55) V 156.

[71] Hawthorne (1997) figs. 5–6. It is well known that closed forms are less susceptible to breaking, but that is not relevant to the argument here.

[72] Recently, Paul Arthur suggested that the difference of late antique cooking wares (closed cooking pots *versus* open casseroles) in the Mediterranean could be related to the difference of specific culinary customs such as meat use (pig/cattle *versus* sheep/goat).

[73] Carandini (1981) 15; Hawthorne (1997) 33–35.

[74] Hawthorne (1997) 34; Hawthorne (1998) 168.

[75] See, e.g., Poblome (1999) 298–303.

[76] See, e.g., Dobbert (1891) fig. 19; Deichmann (1995) figs. 180–81 (Sant' Apollinare Nuovo), figs. 315, 326 (San Vitale); see also Vroom (2003) 310, fig. 11.6.

Figs. 9.1–2 Wall mosaics of the Last Supper and the Hospitality of Abraham, Sant' Apollinare Nuovo and San Vitale, Ravenna, Italy. After Deichmann (1995) figs. 180 and 326.

African Red Slip Ware (fig. 9.3).[77] These fine table wares were mass-produced, and decorated only with simple designs such as rouletting and stamps.[78]

Glass Table Ware

As discussed above, silver drinking cups declined in popularity during Late Antiquity.[79] Their place was taken by cups and beakers made of glass; glass was less expensive than silver, and had the immense advantage of not altering the taste of food and drink.[80] The 4th c. in particular is the great period of luxury glassware, exemplified by a glass beaker/bowl from Cologne with depiction of fishes in *trompe-l'oeil* on the exterior surface.[81] A 4th c. drinking bowl from Cyprus, now in the British Museum, has a similar, though simpler, shape, and is decorated with applied blue blobs and wheel-cut horizontal lines.[82] Drinking glasses and bowls were often gilded, engraved, painted, or cut with rich decoration. The drinking mottoes cut into their rims, such as 'drink and live' or 'drink and prosper', show that they were indeed intended for the consumption of wine.[83] Furthermore, the pictorial evidence shows cups and bowls of various shapes, some of which look more suitable for manufacture in glass than in other materials. In excavated contexts glass tableware is less common than pottery because it is more friable. Shapes found in the Mediterranean vary from huge plates or shallow bowls to conical and stemmed beakers, usually of a pale greenish colour.[84]

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[77] Hayes (1972) 107–11, forms 62–64, figs. 17–18. These forms could have been influenced by metal dishes, as is shown by Byzantine (?) copper-alloy vessels from Nubia in Mundell Mango (2001) fig. 5.4.

[78] See Vroom (2005) 33–41.

[79] Dunbabin (2003) 163.

[80] See Knudsen (2000) 184, 192 for the affordable prices of glass products.

[81] Blanc and Nercessian (1992) 168, fig. 210.

[82] Buckton (1994) 41, no. 18; see also Davidson (1952) 98, nos. 615–16, fig. 7 for similar examples from Corinth.

[83] Ross (1962) 79, no. 94, pl. II; see also Dunbabin (2003) 163–64, n. 69 with more examples.

[84] See, e.g., Davidson (1952) 78–107, nos. 585–684, figs. 6–11, pls. 54–56; Buckton (1994) 40–44, nos. 17–21; Knudsen (2000) 193–95. According to Hayes (1992) 400, during the 6th–7th c. footed goblets of "wine-glass" shape predominate at the Saraçhane excavations in Istanbul, and 'these must have served chiefly as drinking vessels, since comparable shapes are rare in the pottery assemblage'.

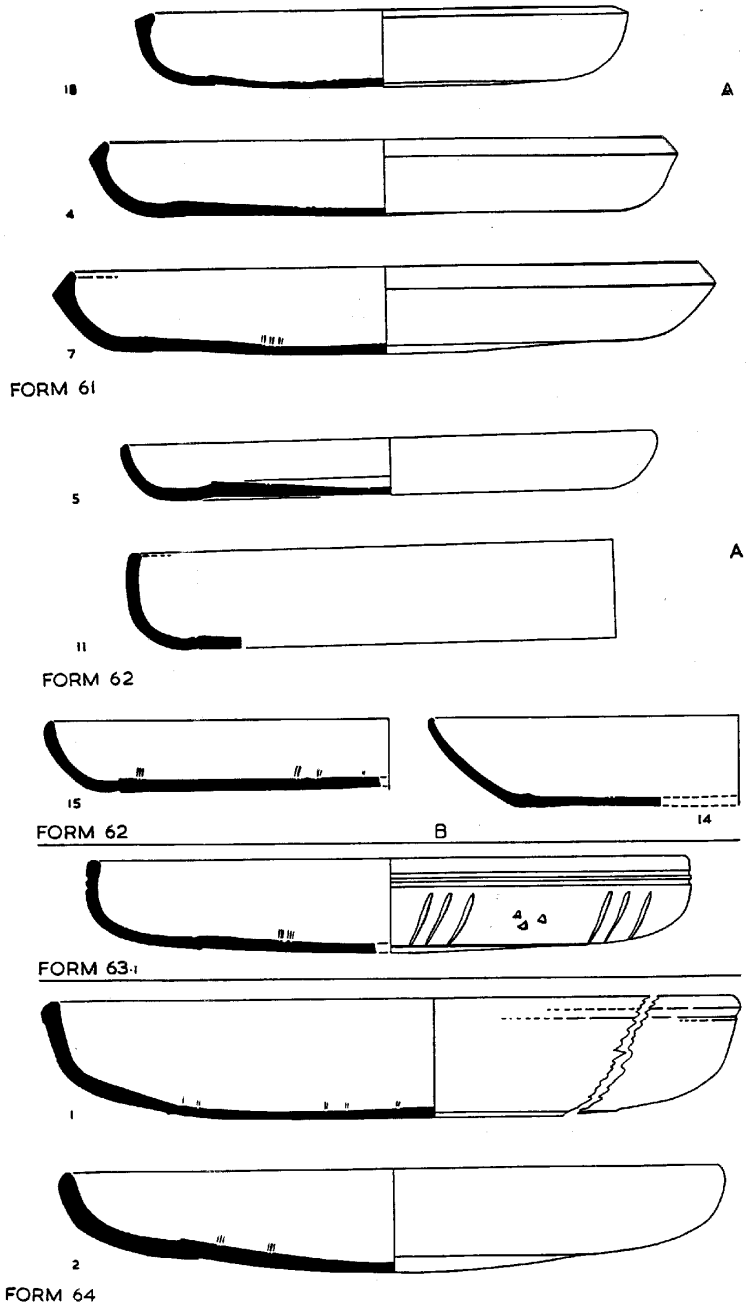

Fig. 9.3 Hayes 1972, 107–111, forms 62–64, figs. 17–18.

The mosaic of the small hunt from the villa at Piazza Armerina in Sicily, of 4th c. date, shows a country picnic amidst a series of hunting scenes, similar to those on the Sevso and Cesena plates and on the miniature from the Ambrosian Iliad previously mentioned (fig. 10.1; see also figs. 1.3 and 6.1–2).[85] In the foreground, three servants are busy with the preparation and serving of food and drink. The glass shallow bowl and conical beaker in the hands of a diner and a servant are noteworthy, as well as the square glass bottles in wicker baskets for the preparation of the meal, in front of the *stibadium*-cushion. Similar square bottles and flasks have been recovered at many excavations in the eastern Mediterranean. They were probably stored for safety in baskets and stands, like the 6th c. limestone stand for water bottles and jars known from Wadi Sarga in Egypt (figs. 10.2–3).[86]

Apart from bowls, bottles and flasks, glass finds also include hanging lamps (sometimes with wick holders). At excavations in Italy, Greece, Turkey, and the Near East, many glass lamps were found in churches, but they also occurred in domestic contexts.[87] Late antique glass lamps can be divided in two groups. The first group consists of beaker- or bowl-shaped vessels with a round flaring rim, a conical or slightly rounded body and three small handles attached to the rim for suspension. The second group includes cup-shaped vessels with a stem, of the so-called *polycandelon* type, which were hung in clusters using different types of chandeliers. It is known from archaeological and pictorial evidence that both types of glass lamps continued to be used until later times. On a miniature of a 9th c. Psalter from Mount Athos, for instance, one can distinguish glass hanging lamps of the first group (suspended with three chains) in a 'liturgical' Last Supper scene.[88]

[85] Carandini, Ricci and de Vos (1982) 175–87, room 30, pl. XXIV, 53; see also Ghedini (1991); Dunbabin (2003) 147–48, fig. 86.

[86] Dalton (1921) fig. 6. Glass flasks of the 5th to 7th c. with moulded decoration (depicting Christian and Jewish symbols) are, in particular, known from Syria and Palestine.

[87] See, for example, Von Saldern (1980) 47–49, nos. 246–48, 250, pl. 11 for glass lamp finds in Byzantine churches and shops at Sardis; Hayes (1992) 400 with further literature for glass lamp finds of the 5th to 7th c. from the Saraçhane excavations in Istanbul.

[88] Miniature, *Psalter Pantokrátoros* 61 (fol. 37r), Athens (2nd half 9th c. A.D.); see also Huber (1969).

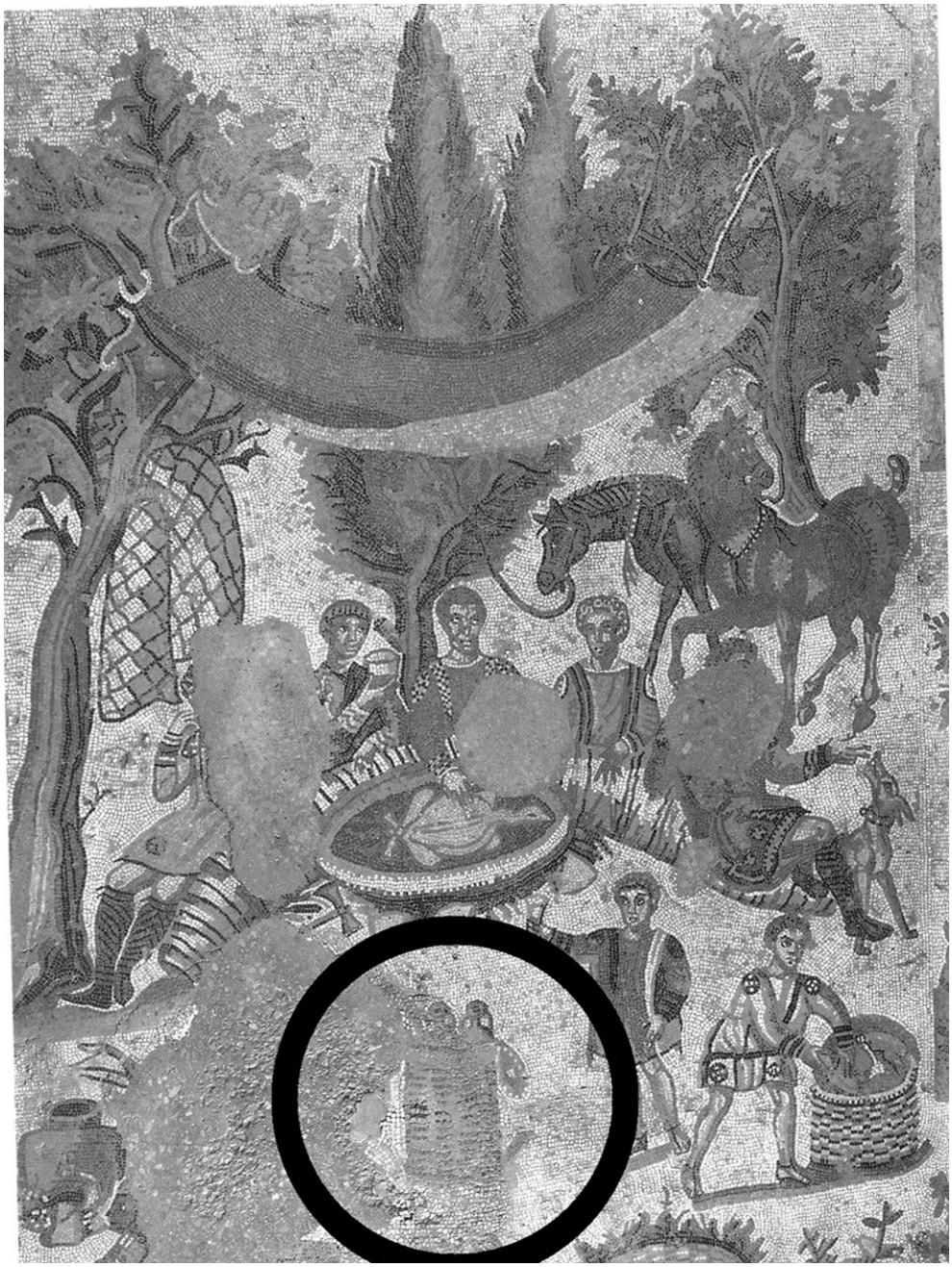

Fig. 10.1 Mosaic of Small Hunt, Villa Piazza Armerina, Sicily, *ca.* 3rd decade of 4th c. A.D. Photo author.

Fig. 10.2 Glass bottles, White Tower, Thessaloniki, Greece, 4th–5th c. A.D. After *Thessaloniki* (1986) 54.

Fig. 10.3 Limestone stand for water bottles, from Wadi Sarga, Egypt, now in British Museum, London, 6th c. A.D. After Dalton (1921) fig. 6.

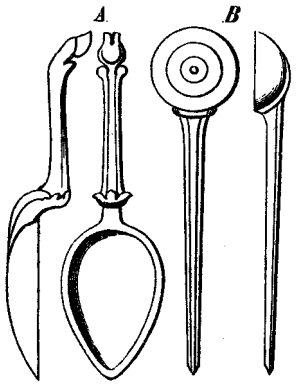

Fig. 11.1 Spoons of the *ligula*-type (A) and of the *cochlear*-type (B). After Marquardt (1886) I 314.

Table Wares in Other Materials

From the Byzantine written sources, it is noticeable that there was a clear-cut hierarchy of materials in this period, in which gold and silver occupied a higher place than other metals, glass and ceramics, while ivory was more highly regarded than ordinary bone.[89] However, expensive materials usually did not enter into the everyday life of ordinary people, and many household and table utensils were probably made of stone (especially mortars and pestles) or of various perishable materials such as wood, leather or basketry. In fact, a late 12th c. act fixing the division of property between three brothers in Thessaloniki shows that the furnishings in their house were made of 'wood, iron, bronze, and other materials'.[90]

Unfortunately, evidence for the former extensive use of these materials is rarely reflected in an archaeological context. Wood figures regularly in hagiographic sources (among them, the lives of St. Benedict and St. Columbanus), and it must have been used widely to make vessels for the table, as shown by a rare surviving late antique wooden fish dish from Egypt.[91] Furthermore, leather could have been used for wine bags and

[89] Kazhdan (1997) 59.
[90] Kazhdan (1997) 59.
[91] Dölger (1922) pl. LXXVIII, no. 1. Because of the arid climate there is also much evidence for wooden furniture from Roman and Byzantine Egypt, such as beds and couches, benches, stools and chairs, tables, cupboards and *aediculae* (household shrines) racks.

drinking utensils; and basketry for containers, as shown on the Piazza Armerina mosaic previously mentioned (fig. 10.1).

Cutlery

The use of cutlery seems to be limited. As we have seen in representations, eating with fingers and bread usually sufficed, even among the wealthy classes. Exceptions to the rule were spoons. One type of spoon had an oval, pear-shaped bowl (the so-called *ligula*, no. A), which is thought to have been used for eating soup, broths, soft foods, and porridge (fig. 11.1 A).[92] This type of spoon was long-lived, and is particularly well-known from treasure hoards. Another type of spoon with a small, round bowl and a long, pointed handle (the so-called *cochlear*, no. B) was probably used for eating eggs, snails, oysters, and mussels (fig. 11.1 B).[93] Spoons of the *cochlear*-type, made of bone, bronze and silver, have been found at the excavations at Delos, Corinth and Sardis, including a bone example from Sardis with round handle and profiled knob.[94] In silver hoards, however, spoons with pear-shaped bowls (of the *ligula*-type) predominate, sometimes marked with the cross or alpha and omega.[95]

Between the 5th and the 7th c. silver spoons with pear-shaped bowls engraved with *chi-rho* monograms may have been used in religious rites, like the offering of the communion; those engraved with beneficent inscriptions may have been given as christening presents. S. Hauser studied 11 groups of silver *cochlearia* (in total 228 spoons) of the mid 5th–mid 7th c. and concluded that these spoons—apart from being liturgical—were also a chic eating utensil, used together with exquisite table ware.[96]

After the late antique period spoons became less common. For instance, at the excavations in Corinth, most bronze, ivory or bone spoons found date to the Roman period, with considerably fewer examples from later

[92] Marquardt (1886) I 315.
[93] Marquardt (1886) I 315–16.
[94] See, e.g., Crawford (1990) figs. 508–509; see also Davidson (1952) 189, nos. 1396–99, nn.89–90 for the *cochlear*-type of spoons and nos. 1392–95, pl. 84 for the *ligula*-type of spoons from Corinth.
[95] See, e.g., Strong (1966) 204–206; Buckton (1994) 118–19, no. 133, figs. 2.1–10; Leader-Newby (2004) 75–82; see also Hauser (1992) for more silver examples. There is also an example of an ivory spoon (*ligula*) from Corinth with the end of the handle broken off (probably of the 1st–2nd c. A.D.).
[96] Hauser (1992) 78–87.

deposits.[97] Furthermore, continuity between these Roman spoons and later examples of the 12th–13th c. is far from proven.[98] It is possible that in the intervening period spoons were made of more perishable materials, such as wood, bone, or horn. Early Medieval examples made of horn have been found in Frisia, in the northern part of the Low Countries, and look similar to excavated spoons of bone and wood from England and Norway.[99] However, hardly any examples in these materials have been recovered from the Mediterranean.

The written sources mention knives which were made of iron with bronze or bone handles, while the wealthy classes used silver ones which were sometimes decorated with ivory handles.[100] At the excavations in Sardis, several iron knives were found with a straight back and edge narrowing to sharp point.[101] Incidentally, a much earlier Roman relief, of the 1st c. A.D., now in the Vatican Museum, shows the sale of metal hardware (and among it are knives in the same shape as those found at Sardis).[102]

Silver and metal forks were probably used little at the table. Excavated examples are extremely rare and can be dated to the Roman period, for instance a silver example dating to the 3rd c. from France.[103] Gregory of Nicaea remarked in the 4th c. that during dinner the upper classes used silver *peronas* which were elaborately decorated; they were not yet forks in a modern sense but rather picks (perhaps even tooth picks).[104] To my knowledge, no other Early Byzantine texts mention forks, although a silver fork (*fuscina*) is included in the Auxerre inventory of 7th c. domestic silver plate.[105] Only from the 10th c. onwards do western chroniclers mention their usage during meals at the Byzantine court.[106]

Longer two-pronged forks appear to be more widely used in the Middle East from the 4th to the 7th c., judging by finds excavated at

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[97] Davidson (1952) 189, nos. 1392–1401.
[98] Ward Perkins (1939) 315.
[99] Boeles (1951) pl. XXX, no. 5; Emery (1976) fig. 93; Ward Perkins (1939) pls. LIV–LXV.
[100] Koukoules (1947–55) V 148, n.2; see for instance, Davidson (1952) 191–92, nos. 1411–29, pls. 85–86 for bone knife-handles from Corinth; Buckton (1994) 120, no. 134 for a silver knife-handle from the eastern Mediterranean, probably of the 6th c.
[101] Crawford (1990) figs. 143–44, 147, 409–10, 526.
[102] Crawford (1990) fig. 38; Blanc and Nercessian (1992) 58, fig. 69.
[103] Baratte, Le Bot-Helly and Helly (1990) 80, no. 20, fig. 53.
[104] Greg. Nyss., *Hom. in Eccl.*, *PG* XLIV. 752.
[105] Adhémar (1934) 50, no. 25.
[106] Koukoules (1947–55) V 148, n. 6.

Fig. 11.2 Bread rolls on mosaic, House of the Buffet Supper, Archaeological Museum, Antakya, Turkey, probably early 3rd c. A.D. Photo author.

sites of the Sasanian period in Iraq and Iran (another late 4th–early 5th c. example is known from the Dumbarton Oaks collection).[107] Some scholars suggest that these forks may have been used to help in cutting or serving rather than eating;[108] others suggest that they could also have been used as surgical implements.[109] Similar looking forks to the Sasanian examples were sometimes part of a joined and folding set of utensils. For instance, two uncompleted silver implements intended to be a combined fork and spoon were found at Sevington, Wiltshire.[110] They were dated to *ca.* A.D. 880–90 as they were part of a hoard of coins, ingots and scrap of this date, and perhaps came from the East. The depiction of a two-pronged fork of the Sasanian type on a 10th–early 11th c. Last

[107] See, e.g., Ghirshman (1957) 80, no. 4, fig. 14; Simpson (2003) 362–63, fig. 3.
[108] Sherlock (1988) 311, n. 27.
[109] Davidson (1952) 187–88, nos. 1377–83, pl. 84; Sherlock (1988) 311, n. 26 with more examples.
[110] Ward Perkins (1939) 314, pl. LXIII; Emery (1976) 38, figs. 37–38; Baratte, Le Bot-Helly and Helly (1990) n. 196.

Supper fresco in the Byzantine church of San Pietro at Otranto in South Italy is also noteworthy.[111] The picture seems to indicate that this table utensil was either still in use around that time, or that it was perhaps an integral part of an established iconographic type. Further study should shed light on this matter.

Finally, I will discuss the portrayal of bread on the table, which could have been used as some sort of spoon or supplementary eating utensil. The shape of the round, cross-marked loaves on many pictures looks quite analogous to representations of bread on much earlier Pompeian frescoes as well as on late antique sarcophagi and mosaics, and real excavated examples of the 1st c. A.D. from bakeries in Pompeii (fig. 11.2).[112] It has been suggested that, from Antiquity onwards, these loaves (the so-called *quadrae* or *artes quadrati*) were incised in 4 or 8 parts to simplify the breaking of the bread during the meal and the sopping up of food.[113] In fact, the number of these loaves corresponds each time (both in religious and secular art) with the number of diners, which was either done for artistic purposes or perhaps to show that guests were served one loaf of bread each during dinner.

Conclusions

Several observations can be made from this preliminary analysis of the pictorial and archaeological evidence of dining furniture and table ware in the late antique period. The ancient practice of reclining during meals appears not to have disappeared in the eastern Mediterranean, although it became rarer in the western parts of the former Roman Empire, where the 'barbarian' habit of sitting at a table was gradually adopted. From the 5th c. onwards the religious, biblical and secular banquet scenes in the East show diners reclining in an hierarchical order on a cushioned *stibadium*-couch around a small round table or semi-circular *sigma*-table, expressing as such the status and conspicuous consumption of the upper classes in late antique society. The depicted scenes are supported by the archaeological evidence of special designed dining rooms, furniture and table utensils of the same period, providing

[111] I would like to thank Marco Leo Imperiale for this information.
[112] Dölger (1922) pl. 78, nos. 7–8; Dölger (1936) pl. 13.
[113] Dölger (1936) pls. 13–6; Blümner (1969) 88.

Fig. 11.3 Miniature of 'Story of Joseph', Ashburnham (or Tours) Pentateuch, Bibliothèque Nationale *lat. 2334* (fol. 44), Paris, *ca.* late 6th–early 7th c. A.D. After Weitzmann (1979).

a background against which the evidence drawn from the pictorial and literary sources can be tested.

Food may have been prepared and cut up before bringing it to the table ready to eat. Serving tables were perhaps set up in another part of the dining room, displaying the food to be enjoyed and also perhaps the owner's silver service, not shown in dining scenes.[114] In front of the *stibadium*-couch and *sigma*-shaped table, the room was left clear for the service of food and wine (with a large metal samovar), and for the washing of the hands with a *patera* and ewer during and after dinner. It is likely the couch and table were covered with richly decorated textiles and cushions and illuminated from the back by a metal lampstand (or other portable lights made of pottery and glass).

[114] See Marquardt (1886) I 319–20 on the use of tables for serving and display; see also Ellis (1997) 41–51.

In the majority of the pictorial evidence from the 5th to 9th c., there are no separate items of table ware for individuals such as plates, beakers, knives, spoons, or forks depicted on the table, and even drinking cups and jugs may have been shared.[115] We can therefore assume that as the well-to-do classes were apparently eating mainly with their hands, the less wealthy were not doing otherwise. From the archaeological evidence we learn that spoons were perhaps the only type of eating implement consistently in use throughout the period (even though they do not appear in the pictorial evidence). The diners apparently ate their food, or at least the first course, from a centrally placed, communal dish, with their fingers, or occasionally with metal spoons. The shape of this communal dish looks quite similar to excavated examples in silver as well as earthenware, such as the ones in Late Roman Red Slip Wares, confirming that the representation of a single large dish is not just an artistic convention. These large silver and earthenware dishes nearly covered the entire table, which must have been about a metre in diameter at most, leaving room only for very small items such as bread rolls. In fact, around the communal dish one can often discern several loaves of bread, one for each guest, which could have been used as a sort of spoon or eating utensil. The illustrations seem thus to confirm the abundance of bread in the Byzantine diet.

Finally, a remarkable piece of indirect evidence of late antique dining is provided by the biblical banquet scene from the so-called Ashburnham (or Tours) Pentateuch, a late 6th or early 7th c. manuscript probably from North Africa or north-eastern Italy (fig. 11.3).[116] The dining scene is a good example of communal dining without cutlery or individual plates. In fact, all diners, reclining on a cushioned couch around a semi-circular table, are actually reaching with their hands into a single communal dish in the centre. The shape of the dish is difficult to see, but one can roughly distinguish a very large and flat plate. I will not go into the contents of the plate, but the greedy communal grasping of the food alone really whets the appetite.

[115] Different utensils might have been used at different occasions such as picnics, funerary scenes and indoor dining, as noted above.

[116] Weitzmann (1979); see also Vroom (2003) 312, fig. 11.8.

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THE MODENA WELL-HOARDS: RURAL DOMESTIC ARTEFACT ASSEMBLAGES IN LATE ANTIQUITY

Sauro Gelichi

Abstract

This article discusses a number of late antique well-hoards found in the vicinity of Modena, which the author investigated in an earlier work published in 1994. Here, the coherence of this group, the nature of the finds from each hoard, the identity of their possible owners and their dating are re-considered. The author also questions his earlier supposition that the hoards were deposited as a result of generalised crisis, and an argument is presented that they reflect the rural material culture of a more continuous transitional period.

The Modena Well-Hoards: Their Location and History

"*L'anno 1839 procedendosi a tagliare le annose Quercie del Bosco di Sgolfo, nell'atterrarne una si avvenne il contadino in un pozzo pieno di rottami e terra*".[1] It was with these words that the history of the artefacts known as the Modena Hoards began. The well in question, emptied in 1841, contained an unexpected archaeological haul: over 100 pieces of pottery, around 15 bronze vessels, some wooden items, lead weights, fragments of soapstone vessels, and other objects besides.[2] From the name of the property on which it is located, this well came to be called 'Sgolfo'.

The first expert to examine the material subsequent to its discovery, C. Pancaldi, believed that the hoard dated to the Etruscan period. Noting that the deposition of the hoard was intentional, he assumed that it held a ritual significance, and linked the material to Bacchanalian rites that he assumed had occurred in the region. This idea was suggested by the '*signati* pots', vessels that bore incised marks in their clay, which

[1] Pancaldi (1841) 13–14.
[2] Gelichi (1994a) 15.

L. Lavan, E. Swift, and T. Putzeys (edd.) *Objects in Context, Objects in Use* (Late Antique Archaeology 5 – 2007) (Leiden 2007), pp. 363–384

were used to mark the measurements for the quantities of oil, wine, and other liquids used for libations.

At the time, the find was considered in some respects exceptional for the quantity and range of objects, but some years later a similar hoard came to light nearby. This second well, named 'Casini' after its owner, was excavated in 1867 by an archaeologist named Arsenio Crespellani,[3] and fortunately we possess more information about the nature of the actual excavation than was the case for the Sgolfo discovery. This second cache of objects also contained numerous ceramic pots, iron utensils, bone, wooden objects, and bronze vessels (fig. 1). Crespellani, like Pancaldi before him, noted that the material appeared to have been deliberately deposited, but he interpreted its age as somewhat later than the Etruscan period. He felt that the reason for the deposition of the vessels was linked to their original sacred ritual context: they had been deposited in the hope that they might avoid desecration. Thus, he reasoned, the objects perhaps came from a time when there were threats from both Christians and invasions.

The haul from the region's wells was not yet complete, however. Three years after the publication of Crespellani's volume, during excavations at the Bronze Age settlement of Gorzano, a new well came to light.[4] The excavation, led by F. Coppi, revealed a hoard similar to the two earlier finds: numerous ceramic vessels, along with agricultural tools and several bronze vessels (fig. 2). This find essentially brought to a close what might be considered the first phase of research into the so-called Modena well-hoards. Of all those who studied the hoards during the period, only Crespellani devoted particular attention to the function and chronology of the material, or speculated about their significance. Other researchers were content with the stylistic analysis of individual pieces from specific sites, such as the finely decorated bronze jugs.

Interest in the well-hoards was reignited in the early 1970s, when, on the banks of the River Panaro in the region of San Cesario, a new well was excavated that apparently contained items similar to those discovered in the Sgolfo, Casini, and Gorzano wells (fig. 3). The discovery at San Cesario afforded a fresh opportunity to re-examine the three sites uncovered in the 19th c., alongside other subsequent discoveries made during the interim (such as the Spilamberto well), and to make a full

[3] Crespellani (1875); Casini (1878).
[4] Coppi (1879).

Fig. 1 Pottery, iron tools, and other objects from Casini well-hoards (original 19th c. photo).

reconsideration of the hoards' function and chronology.[5] The deliberate nature of the material's deposition was now fully accepted, and this proved to be an influential factor in attempts to unravel their dating. The items were now assumed to have had no intrinsic ritual value, and thus the primary reason for their deposition was likely to be for the purposes of their concealment. From their nature and form, the objects seemed to relate to some time in the late antique/Early Medieval period; consideration was given to the period of the Magyar invasions (10th c.), but this was ultimately dismissed in favour of a date somewhere in the Gothic and Lombard period (late 5th–mid 7th c.).

[5] Maioli (1983).

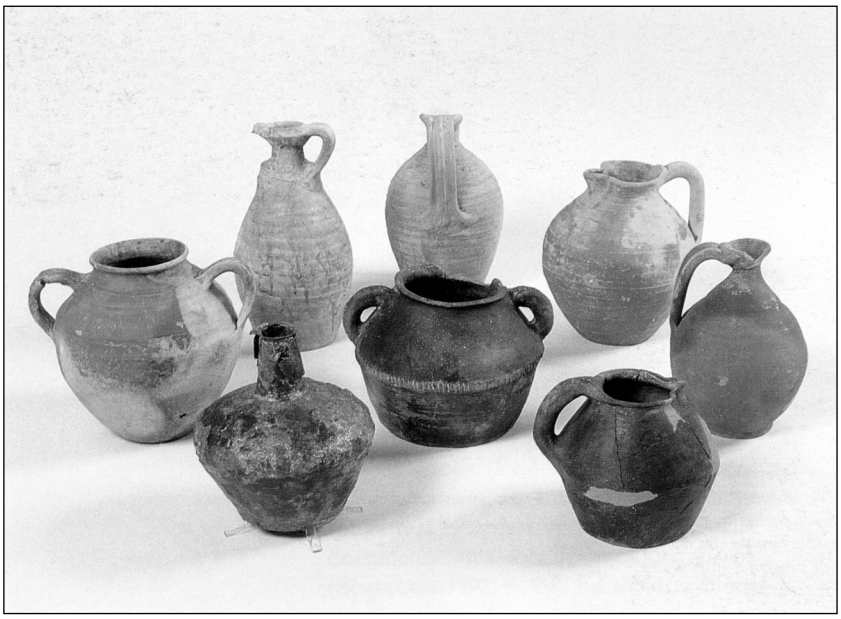

Fig. 2 Pottery and bronze vessels from Gorzano well-hoard.

The Region of Mutina in Late Antiquity

A distribution map of these sites reveals clearly enough the regional nature of the phenomenon. An initial group of wells are to be found near Bazzano (UBO); another group near the River Panaro; a third group, discovered in the 80s and 90s (see *infra*), in the vicinity of the river Rubiera. All these places, including Bazzano (now under the administration of Bologna), must have belonged, in antiquity, to the region of the ancient town of Mutina.[6]

The town and the region of Mutina seem to have enjoyed, even in the 4th c. A.D., a certain prosperity. At the beginning of the century, the inhabited area was included in a group of strongholds intended to hold back the advance of Constantine.[7] The same period saw the first bishop of Mutina (Geminianus). Information regarding the local aristocracy has been drawn from cemeteries, found in various parts of

[6] On the borders, see Rebecchi (1983).
[7] Malnati (1988).

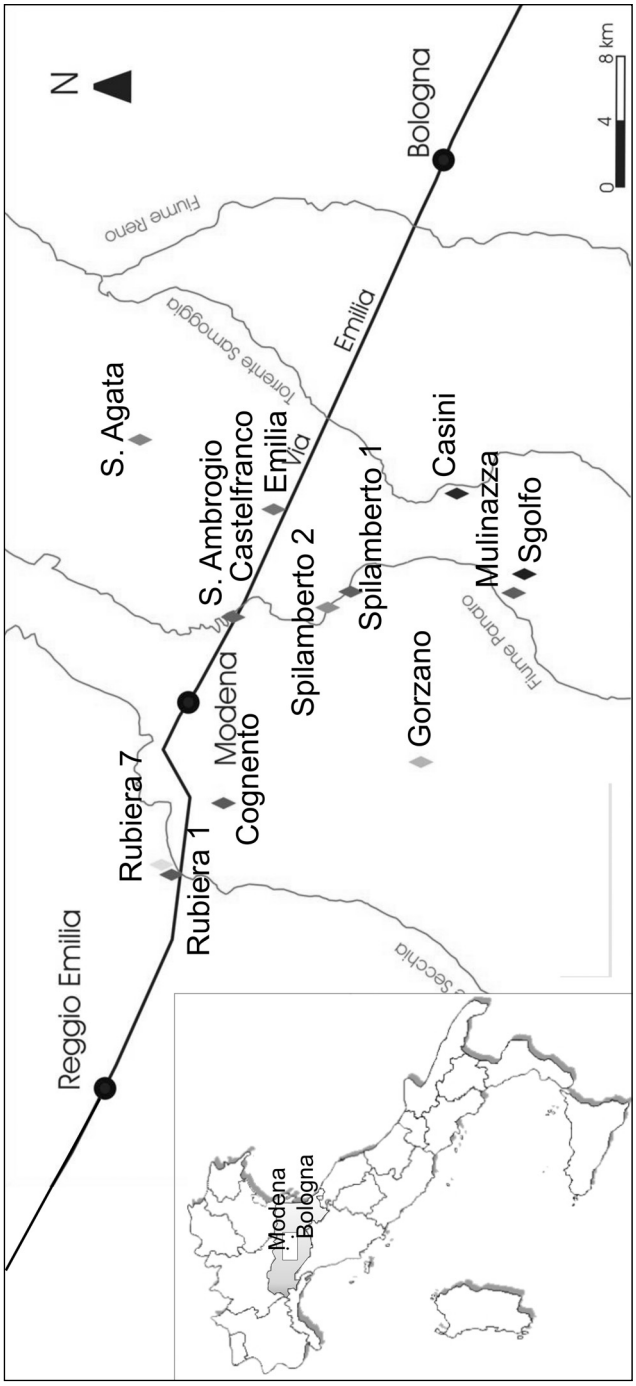

Fig. 3 Location map of the Modena well-hoards.

the town,[8] for which materials from the 3rd c. were often re-used (such as sarcophagi), but which still provide evidence of considerable wealth and items of personal dress. Also of the 4th c. (but some experts say the 5th c.) is a colourful mosaic belonging to a building of some status (a find from Vicolo delle Asse), although it is not clear if this was a church.[9] Towards the end of the 4th c., however, the bishop Ambrose includes Mutina, together with other towns of Aemilia, among those which were 'half-destroyed',[10] even though this term may be subject to diverse interpretation. A critical situation is also recorded in the 5th c., when Mutina, once famous for its manufacture of cloth, finds no mention as the manufacturing site of fabrics being supplied to the Imperial army.[11]

The surrounding area also seems to have been densely inhabited. Some workshops for the production of pottery are recorded during the first Imperial age.[12] A fairly detailed study of settlement density shows the same trend as found in the rest of the region.[13] A decrease in settlement during the late 3rd–early 4th c. was followed by a slight revival in the 5th and 6th c.[14] There must have been something of a downward trend, however if, in A.D. 337, the barbarians of Taifa were quartered in the region with the intention of repopulating it.[15]

Between the 6th and 7th c. the situation appears to have changed substantially. During the Longobard period Mutina must have been quickly conquered, but also lost again in A.D. 590.[16] Rural burials with Longobard objects (third quarter of the 6th c.) have been recorded near the inhabited area and the surrounding region,[17] indicating the likely presence of new land owners.

The town and its surrounding region formed a frontier between the kingdom and the exarchate for about 50 years.[18] It was only after the battle of Scoltenna (now the River Panaro), when the Imperial

[8] Parra (1988).
[9] Gelichi (1988) 558.
[10] "Semirutarum urbium cadavera", Amb. *Ep.* XXXIX, 3.
[11] Mazzarino (1951) 252–53.
[12] Giordani (1988).
[13] Giordani and Labate (1994).
[14] It is probable that this considerable difference must be attributed to changes in settlement and not to depopulation in the country.
[15] Amm. Marc. XXXI. 9, 4.
[16] According to written sources; Duchesne (1626) 870–72.
[17] Gelichi (1988) 561–65.
[18] Gelichi (1994b).

troops were defeated by the Longobard king Rothari, that the region of Mutina returned under the control of the Longobards. Traces of the occupation of the town in this period are scarce. In the necropolis of Piazza Grande (Modena) a great layer of alluvium may date back to the end of the 6th c. The surrounding area also appears to show traces of crisis in this period, as evidenced by the disappearance of most of the *centuriatio* of land and a substantial decrease in the number of settlements. Other areas, however, seem to have survived rather well, such as the area around what was to become the monastery of San Silvestro of Nonantola.[19]

With regard to the town, there seems to have been a revival only from the time of *Cunipertus rex* who, in A.D. 689, restored the town to its former decorum.

Research in the 1990s: Analysis and Interpretation

The early 1990s saw the inception of a project intended to fully index the material, and subject the pieces to scientific analysis, with the hope of offering more specific and less generic information about the objects, which would in turn lead to a more informed discussion of the hoards' significance. The period since the 1970s had also seen the excavation of other wells in the Modena area (Cognento, Rubiera); although the material derived from these excavations turned out to be rather different to the already-excavated wells, the pottery in both groups had marked similarities. Thus, there was a valuable opportunity to study several artefact assemblages that appeared to form a very conspicuous group, derived from a small geographical area and (it was to be assumed) an equally short span of time. Unfortunately, however, this research project never achieved its original goals; of the expected volumes, only the first was ever published, which was closely linked to an exhibition.[20]

In that volume, the present author attempted to reassess the individual sites that had been grouped together under the category of 'well-hoards', with the intention of verifying whether or not this association

[19] The monastery was founded in the 8th c. A.D. by the Longobard Anselmus; Gelichi and Librenti (2004).

[20] Gelichi and Giordani (1994).

was indeed justified. I also attempted to tackle the well-worn question of the objects' function and dating. Although I find myself uncertain of some assumptions that were made at the time, I believe that they are helpful in enabling a further advance in attempts to understand the material. In order to make such an advance, however, it will at this stage prove necessary to recap the general assessment of the objects that I made at the time, now some 10 years ago, in order that we can move beyond them towards a reassessment of the evidence.

The first issue that was addressed concerned the belief that the hoards should be considered together, as a group, because they share certain crucial characteristics; 8 discrete artefact assemblages were thus selected for side-by-side comparison (fig. 4). The first step was to consider what types of object were present in each assemblage, regardless of their quantities. Local red slip ware was found in all of the 8 contexts, and other categories of objects were found in nearly all of them (coarse ware, wooden objects, and lead objects). Metal objects (utensils, tools, vessels) were found in several of the contexts, and finally there was a fairly considerable range of objects recovered on only a few occasions. If this latter group of objects are removed from the equation (as having little significance), we are left with only 7 commonly recurring categories of item. When we consider these key 7 categories, we find that only 5 of the hoard-contexts contain all (or almost all) of them (Casini, Sgolfo, Gorzano, Spilamberto 1, Spilamberto 2); furthermore, these are the 5 hoard-contexts that contain objects whose presence in the wells could not be said to have come about by chance: the iron tools (because they have no use in the drawing of water), and the bronze vessels (because of their intrinsic value and their high quantity).

The second issue concerns the number of items in the wells and the categories to which they belong. The greatest number of finds are of

	Local red slip ware	Coarse Ware	Wooden vessels	Lead	Iron Instru-ments	Other lead and iron tools	Bronze vessels	Bone	Personal clothing objects	Soapstone vessels	Disk-shaped weight	Lamps	Ampho-rae	Coins
Casini	×	×	×	×	×	×	×	×					×	×
Sgolfo	×	×	×	×	×	×	×		×	×				×
Gorzano	×	×	×	×	×	×	×	×			×			×
Spilamberto	×		×	×	×	×	×						×	×
Spilamberto	×	×	×	×	×	×			×				×	
Rubiera 7	×	×	×	×					×				×	×
Cognento	×	×	×											×
Rubiera 1	×	×										×	×	

Fig. 4 Main categories of artefacts from the well-hoards.

pottery (nearly all closed forms), which mainly belong to the category of cooking pots (handmade or on a slow wheel) or those for liquids and storage (pitchers, jugs, some amphorae) made with refined clay and often entirely (or partially) red painted. The pottery corresponds to the type which was widespread in the rural areas of Mutina between the 4th and 7th c.

Another category of items found in the wells is that of metal vessels. Most of these are copper cooking pots, usually bi-conical in form, often with a handle for hanging. These items are of rather uncertain date, also due to their common form which changes very little in the course of time. Some shallow pots recall traditional Roman forms, but those with tall sides correspond above all to artefacts from the 4th–5th c. A.D.[21]

Of greater significance, also because of the absence of decorative features, are a bronze *situla* from the Sgolfo well, a series of bronze jugs from the same well and lastly a bronze jug with a dolphin handle from the Spilamberto 1 well.[22] The bronze items are from diverse periods and almost always bear signs of repair and restoration. The most important item, also in term of quality of decoration, is a bronze jug from the Casini well, of tapering form, decorated with tracery on the handle and with a bas-relief decoration damascened on the shoulder. In this case, the handle, which is considered to be from quite a late period because of its decoration (3rd–5th c.) seems to have been welded onto the jug at a later date.[23] The other jugs are simpler, generally having a smooth body and some decorative feature at the base of the handle (usually a satyr's head). For these items a fairly general date is suggested of between the 2nd and 3rd c. A.D.[24] The *situla* from the Sgolfo well shows a handle attachment in the form of a stylised female head, set on a palm-like feature. This item has been dated back to the 3rd c. A.D.,[25] but the handles may not belong to the pot. The two bronze bottles found in the Gorzano well,[26] seem to be of the 5th c., with their handles also not belonging and bearing many traces of restoration. The group of metal vessels for either liquid or for cooking contain

[21] Maioli (1994) 106.
[22] Maioli (1994) 106.
[23] Maioli (1994) 100, fig. 18.
[24] Maioli (1994) 102.
[25] Maioli (1994) 103.
[26] Maioli (1994) 103, fig. 105, 5–6.

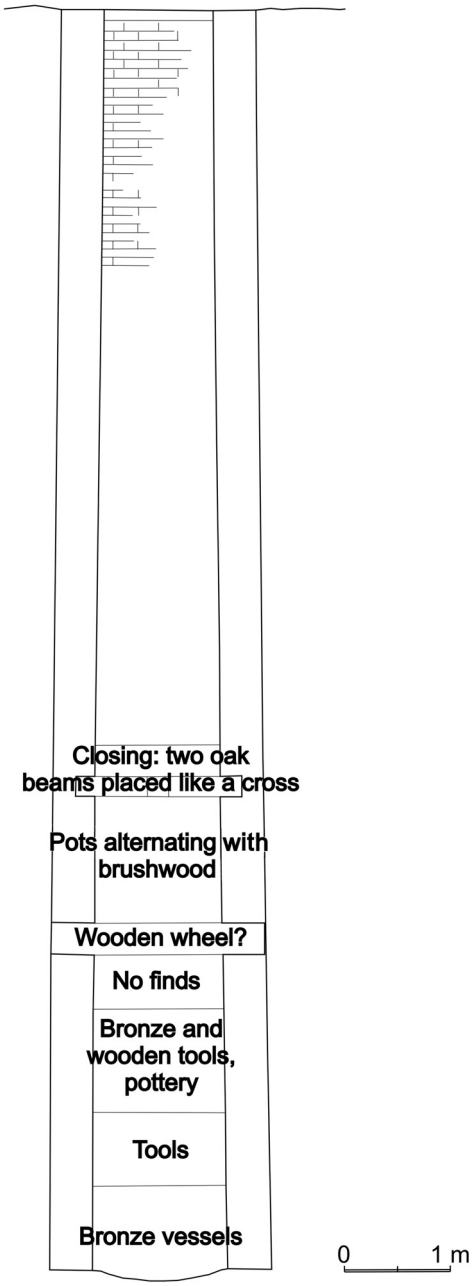

Fig. 5 The stratigraphy of the Casini well (modified from Crespellani).

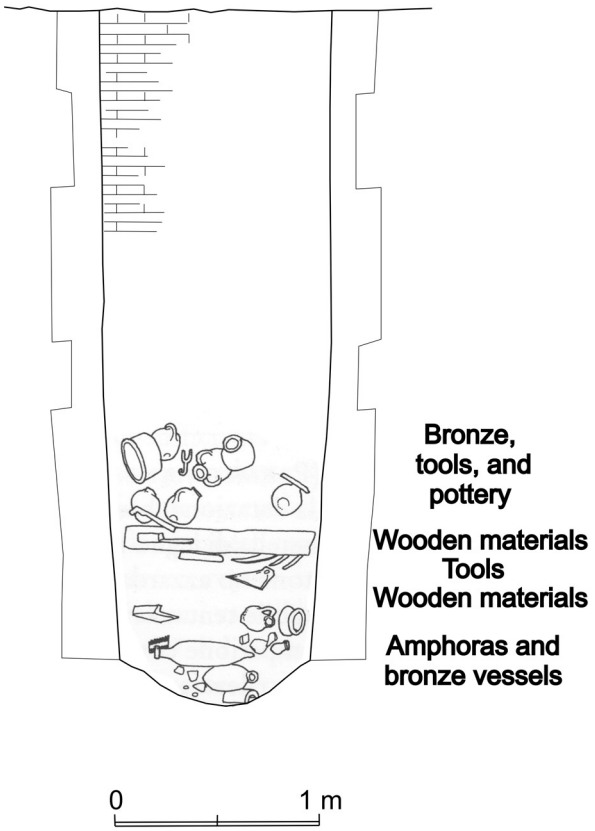

Fig. 6 The stratigraphy of the Spilamberto 1 well (modified from Maioli).

some items of notable worth (like the jug from the Casini well), some of average quality and a series of items for common use. It is rather difficult to date these vessels as the time of their manufacture (although not precisely attributable) apparently does not coincide with the time of their deposit, when two factors are considered: the marked signs of wear which most of them bear, and the equally evident and repeated signs of restoration. Nonetheless it may be stated that the oldest artefacts seem to have been made between the 2nd and 3rd c. A.D., while the more recent ones appear to be from around the 5th.

Another category of artefacts found in many of these wells is that of metal tools (farming tools and perhaps weapons).[27] Among the farming

[27] Parenti (1994).

tools there are pitchforks from the Spilamberto well 1 (three, one of which is a fragment) and, from the Casini well, tools used for breaking up the earth and working in vineyards and olive groves. Another farming tool is a triangular-bladed hoe, used for light soils and for earthing up plants. From the Casini well there also came a kind of pickaxe.[28] Some of the metal items are not always only linked to agricultural work. This is true, for example, of a *francisca* (a throwing weapon) found in the Spilamberto 2 well, and a Longobard axe from the Casini well: the latter might also be taken to be a tool for woodworking. On the basis of indications, above all funerary, the assumption has taken hold that this kind of artefact belonged to people of a high social status,[29] but this is by no means certain.

Attempting to trace the category of owners of the items from the various wells was very difficult, not to say impossible.[30] The complete lack of archaeological references relating to the situation in which these wells are located makes such an association even more difficult. Furthermore, the wells under analysis represent above all, with regard to the quantity of items conserved, an unusual archaeological category. If, as I believe, the specific nature of deposits is the fundamental feature of this category, only when these are made clear can the identity of the owners be established. However, considering the types of most of the artefacts (from pottery to wood, from farming tools to household utensils) and also the state of conservation of the metals (perhaps the items of greatest worth found in the wells) the association of these artefacts with rustic colonies does not seem unlikely.

The fourth and final issue that was addressed is the dating of the hoards. It might have been hoped that once the objects themselves were open to sustained scrutiny and more rigorous analysis, a more precise date for the depositions could be achieved, but such precision remained elusive. It was realised that the items easiest to date were the oldest (Roman coins and bronze vessels, presumably being reused and recycled), and that the objects of the greatest quantity—the ceramics—which were assumed to be contemporary with the time of deposition, were not datable with any great precision. The objects that seemed to be the latest were: a 6th c. coin from the Cognento well; a bronze ves-

[28] Scagliarini Corlaita (1980) 65.
[29] Parenti (1994) 117.
[30] An usual situation for the hidden objects; Gelichi (2004).

sel and what was probably a cooking pot from the Spilamberto well, which could be dated to the 6th–7th c., although similar items found in Milan had been dated to the 3rd c.; a *francisca* from the Spilamberto 2 well, dated to *ca.* A.D. 620; and, most crucially of all, an axe from the Casini well, of a type found in Italy only in the first half of the 7th c. On this basis, I argued that the deposition of the hoards must date from approximately the mid 6th c., and into the first half of the 7th c.

The conclusion that I reached at that time was that at least one category of objects within a number of the wells was the result of a deliberate concealment that occurred sometime in the 6th–7th c.; at the time I associated the objects' concealment, rather straightforwardly, with a period of instability when the Modena area formed the borderlands between the Byzantines and the Lombards, which lasted in the region of 50 years and ended in the mid-7th c. I linked the objects to the idea of some sort of temporary abandonment of the rural landscape, a trend that I saw reflected in other archaeological markers (such as the abandonment of centuriation) and historical facts (the written sources that describe a crisis in the Modena region). This was a presupposition, based upon the idea that a borderland, which this area undoubtedly was, is always the scene of abandonment or settlement impoverishment.

The Nature of the Hoards

These hoards do not all belong together: they do not represent a single group. Some, as has been demonstrated, do have common features, but others must surely be considered as intrinsically different: this, of course, does not mean that they are not themselves important for studying various aspects of the late antique rural landscape. There are two grounds on which we can decide which contexts should be considered to form a coherent group, and which should not: the nature of the items they contain, and the quantities of items they contain.

Firstly, one can presume that certain objects found in the hoards are unlikely to have made their way into the wells by accident. Agricultural tools, for example, or items of weaponry, have no link to the functional purpose of a well. But it must also be pointed out (and this will be considered more fully below) that some of the objects found in other artefact groupings, such as pottery, have an air of being a *selected*, rather than random, assemblage. A plausible hypothesis that the greater number of closed forms is related to a desire to preserve their

contents (rather than the pot itself) cannot be upheld in this case, as it does not correspond well with the type of container, and above all, to the difficulty of periodic access to it.

Secondly, with regard to the quantities of items, it is instructive to compare what we know about the amount of material from two of the 'well-hoards'—Casini and Sgolfo—with material recovered from two other more-or-less contemporary wells in a nearby area, Bubano and Orto Granara, which have been recently studied and published. The quantities of objects recovered is manifestly different, and the material excavated from the wells at Bubano and Orto Granara clearly reflects standard trends of loss during the life of the well which are very different in profile to the material from Casini and Sgolfo. This evidence is not conclusive, however, as the evidence may reflect differential patterns of use of individual wells: perhaps Casini and Sgolfo were used more heavily, or needed to be dredged or drained for some reason, and so some ambiguity remains. Despite problems such as this, it remains possible for us to consider the worth and value of the individual objects to the communities that lost them.

If the explanation for the well-hoards is deliberate concealment of the objects in order that they might be preserved and retrieved at some point in the future, then we have to accept that these communities sought to preserve not only some metal objects, but also some types of pottery. This is very unusual within classical antiquity, though attested in other cultural contexts, with several recorded examples coming from the Islamic world (the treasure of Caesarea, from the Fatimid period, comprised ceramic, bronze, and glass vessels),[31] the Byzantine world (the Lebeczu treasure, of the 13th c., which contained ceramic vessels alongside gold jewellery and other items), and even the western world in more modern times (the Gorlsdorf treasure, hidden in 1945, made up of porcelain).[32] But in the Roman world it is unusual for ceramic objects to be included in buried treasuries of high value items. Thus the hoards may illustrate something significant about the concept of value in relation to the material culture of Late Antiquity.

The hoards lack objects that would give them very specific date-ranges. However, they do contain some objects—such as the Red Slip Ware and the coarse ware—which are quite common, and look most

[31] Arnon, Lester and Polak (1999).
[32] Künzl and Painter (1997) 301–303.

likely to come from the 5th–6th c. Some other individual items may well be later in date, such as the axe from the Casini well and the *francisca* from the Spilamberto 2 well, but it is unlikely that they are any later than the first half of the 7th c. Thus it is clear that the contexts in which they were discovered went out of use sometime in the 5th–7th c. This means that in a rather limited span of time, all of these wells ceased to function as wells. Local or wide-ranging economic phenomena must lie at the source of this generalised pattern of abandonment.

A Critique of my Original Hypothesis

Whilst I cannot offer any brand new evidence in the quest to better understand this material, it seems extremely apposite to air some of the doubts I now have about my original interpretation, especially in light of the expanding dating frameworks being uncritically constructed around it. The idea that a borderland, which this area undoubtedly was, is always the scene of abandonment or settlement impoverishment is an assumption, which recent research has shown is not always correct.[33] Even the concept of a 'borderland' is much more ephemeral that was once thought,[34] and even if some of the well-hoards are indeed the result of deliberate concealment, this may reflect neither fear nor instability.[35] It is my intention, therefore, to re-examine the problem of the Modena well-hoards, and, most importantly of all, attempt to understand what they might tell us about the nature of rural life in northern Italy during Late Antiquity.

The Modena Well-Hoards and Rubbish Deposits Compared

A decade after my article on the well-hoards, I continue to be convinced that we still lack a definitive explanation for them. Nevertheless, they remain a fascinating group of assemblages, providing us with groups of associated objects from rural communities, the collection and deposi-

[33] Toubert (2003).
[34] Gasparri (1995).
[35] Gelichi (2004).

tion of which is likely to have occurred within a short space of time. Admittedly, we lack any firm evidence relating the wells to settlements, but there can be little doubt that the contexts should be linked to rural communities. Thus, as we lack a precise explanation for the nature of the hoards themselves, we need instead to approach the material with another question in mind: how might this material aid us in defining the material culture of late antique rural society? This paper will now move on to address this very question, and compare the well-hoards with approximately contemporary material recovered from a refuse-pit in a nearby rural settlement.

The particular refuse-pit with which the well-hoards will be compared is layer 84 from the rural settlement of Casalecchio di Reno.[36] The pit was located in a courtyard area, adjacent to a large Roman-era building which was still occupied in Late Antiquity. The settlement at Casalecchio di Reno is both well-excavated and published, which makes it an important rural site in the region, and one of few where quantitative information about artefacts is available. When the two datasets are compared side-by-side, the objects can be separated into three clear groups (fig. 7): objects that are found only in the well-hoards, objects found only in the refuse-pit, and objects that are found in both.

Of artefacts found only in the well-hoards, we are able to make a number of important observations. The wells contain iron tools, and in particular, iron agricultural implements, which are usually absent from normal excavated contexts, and which are most often associated with 'storage deposits', such as the two groups of tools found at Villa Clelia in the Imola region, which seem to have been kept in a wooden box.[37]

Artefacts in well-hoads Casini and Sgolfo wells	Artefacts in wells and in layer 84 Caselecchio di Reno	Artifacts in layer 84 Caselecchio di Reno
Iron instruments	Local Red Slip Ware (closed forms)	ARS and ERS
Axe		
Wooden vessels and objects	Amphorae	Local Red Slip Ware
Bronze vessels		

Fig. 7 Artefacts in wells and artefacts in rural stratigraphy (layer 84 Casalecchio di Reno): a comparison.

[36] Negrelli (2002).
[37] Baruzzi (1978).

Some of these implements may have multiple possible uses, such as the axes, or even the *francisca*. The wells also contain numerous metal vessels which are usually absent from excavated contexts. The condition of these vessels indicates prolonged usage, suggesting that they had a long life-expectancy in these communities, being continually reused and repaired. The situation with the wooden objects is slightly different however: although numerous wooden objects were recovered from the well-hoards, including bowls, buckets, ladles, and combs, their presence is most likely to be the result of the differential conditions of preservation found in the well deposits which guaranteed their survival. Finally, the Sgolfo well yielded some fragments of soapstone vessels, although in very small quantities.

Of artefacts found only in the refuse-pit, we have some specific types of pottery, specifically a fragment of ARS (form Hayes 61B) which dates to the late 5th/early 6th c. and was therefore probably contemporary with the creation of the deposit, as well as numerous fragments of open forms of local red slip ware.

Of artefacts found in both the well-hoards and the refuse-pit, one notices above all the presence of closed forms of local red slip ware, and specifically vessels either for dining (such as jugs) or for food storage (such as two-handled jars and large globular bottles). Alongside these, there were a smaller number of coarse wares, of both open (cooking dishes and 'catini-copericho') and closed forms (jars and jugs). Fragments of amphorae were recovered from both contexts, but only rarely are they whole or almost whole (from the Casini well). These are amphorae of the Forlimpopoli type (i.e. of local production), and also perhaps *spatheia* and African amphorae of Keay XXV type, cylindrical containers of average size originally from Zeugitania and Byzacena (though only from the refuse-pit).

This comparison provides some interesting pointers. My first observation is that, although contemporary, the stories that emerge from these two kinds of context coincide only partially. Whatever the precise explanation for the Modena well-hoards, they seem very different to rural artefact discard assemblages. The most notable difference lies in the absence from the refuse-pit of any metal vessels or tools. These objects have been recorded in contexts that seem to be the result of deliberate concealment, i.e., hoards, indicating that they were both available and valuable to the rural community. Metal implements were in everyday use, and were preserved with care, both for their obvious utility as agricultural tools, and for their intrinsic value as metal. The

same cannot be said of the wooden objects: their presence in the well contexts is most probably linked to favourable preservation conditions. Their modest quantity is not linked to their scarcity, but is rather to be explained by the specific nature of the hoard.

The presence of soapstone vessels, absent from the refuse-pit but present in fragments in the Sgolfo well, might perhaps be explained by the latter context being just slightly later in date. The introduction of this type of object into rural areas, occurred late, sometime after the 5th–6th c. In subsequent times, from the late 7th–early 8th c. onwards, these kinds of vessels were to become extremely common in both urban and rural areas.[38]

In relation to pottery, the comparison throws up some interesting peculiarities. There are two distinct types of pottery: imported (both table ware and amphorae) and local (fig. 8). The latter may be further subdivided into two further categories: local red slip ware and coarse ware (used as both table vessels and storage vessels). In the collection of imported pottery, there appears to be strong similarities between the well-hoards and the refuse-pit, given the small number of ARS recovered; also absent are any containers (amphorae) for international transport. Yet the fine local red slip ware in each context is different.

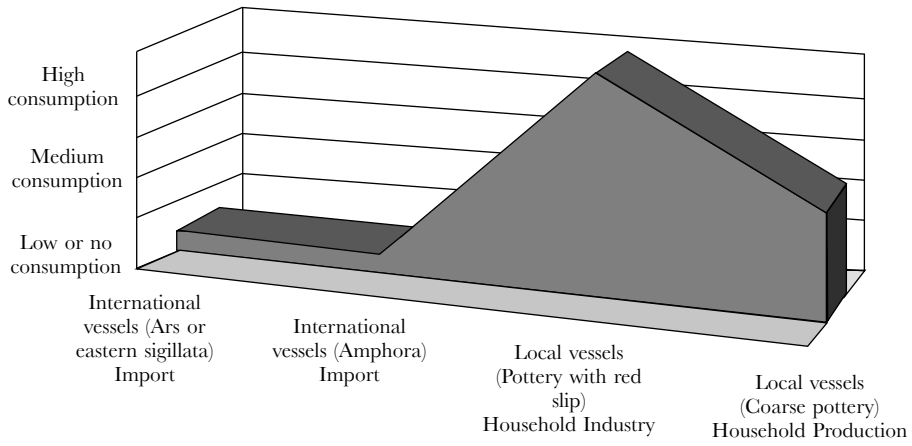

Fig. 8 Schematic diagram of the consumption of pottery and amphorae in the rural communities of the Po area (North Italy) in the 5th–6th c.

[38] Alberti (1997).

This ceramic, which is a painted pottery probably produced as a local imitation of ARS or Eastern Red Slip, is found in abundance in both the well-hoards and in the refuse-pit. However, it is the latter context which gives us a more complete picture of this pottery's patterns of use, as it contains quantities of both open forms (for table use) and closed forms (for both table use and for food storage). Both the well-hoards and the refuse-pit contain cooking pots, but once again, it is the latter context that provides the fuller picture, as it contains 'catini-coperchio' (known as *clibani* in the Roman period) and cooking dishes, of which there are few in the wells.

Conclusion

The scarcity of amphorae in both the well-hoard contexts and the refuse-pit confirms that there was almost non-existent direct access to international trade, and that little use was made of this type of container for the circulation of products on a more limited regional scale. But the local pottery was made on a fast wheel using generally well-refined clay, and was well fired and painted a good quality red. This type of pottery is part of a picture of what remained quite a standardised activity, where good technological skills were used all along the production process, from the use of the wheel, to the use of the kiln, to the surface finish. It could be included in the category that Peacock defines as 'household industry'.[39] The production-and-distribution scenario may well be of areas of artisanal labour arranged within certain *fundi* that functioned as organisers and guaranteed the circulation of products over a limited, yet still relatively widespread, range. The coarse ware, however, has more diverse features: there is less standardisation, although within morphological frameworks it is quite well defined; there is also less technology used to produce the vessels—either made on a slow wheel, or handmade, perhaps in open-fire kilns. This ceramic fits into the category defined by Peacock as 'household production'.[40] The patterns of production-and-distribution appear to be at a lower level, although not necessarily representative of simple production-for-self-consumption: that is, individuals making pottery for their own use alone.

[39] Peacock (1982) 17–25.
[40] Peacock (1982) 13–17.

Ultimately, the items from the well-hoards appear to be a testament to rural communities that had little access to long-distance trade patterns, as evidenced by the almost total absence of ARS and non-local amphorae. Despite this, they were still able to satisfy their own nutritional needs and any eventual surplus must have had a sub-regional circulation, probably to central towns, and thus it must have been transported in containers of local production. The communities must have possessed sufficiently good technology to produce their own iron agricultural tools. At the same time, metal was probably scarce, a fact confirmed by the bronze vessels that had been restored and conserved on a number of occasions during their lifetime. On a cultural level, the communities were still using painted pottery in clear imitation of ARS, which surely means that they had not yet lost touch with the world of Late Antiquity, and indeed, they continued to cultivate and perpetuate some of its habits and customs.

In recent years, attention has rightly been paid to the strong connection between the *floruit* of this type of pottery and a settlement re-organisation in certain rural areas, the beginning of which can be traced back to the late 4th/early 5th c.[41] This re-organisation saw a decrease in the number of smaller properties and a rise in the numbers of large estates. Also symptomatic seems to have been some settlement agglomeration, with the clustering of habitations and services. This evidence suggests not landscape abandonment but continuity of the rural population, through a period of settlement change. The information that we can draw from the well-hoards, once properly integrated with more general aspects of the contemporary rural society, is to be seen in this light. The hoards reveal features of a rural society that shows clear social and economic traits that were typical of the Late Roman world.

In summary, a decade ago I interpreted the well-hoards (or in any case, the abandonment of the well themselves) as symptomatic of local crisis. Today, I see them not as reflecting widespread barbarian trauma, but rather as examples of local dislocation within a rural population that survived the upheavals of this period. I take their contents as primarily reflecting not fear but the everyday material culture of a rural community, that shows continuity with the approaching Medieval world.

[41] Negrelli (2003).

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DECORATED VESSELS: THE FUNCTION OF DECORATION IN LATE ANTIQUITY

Ellen Swift

Abstract

This paper re-integrates decoration with the function of the object and its social context in Late Antiquity. It examines the way that decoration prescribes the function of objects, for example, through the representation upon an object of the activity for which the object is intended to be used. It is suggested that in some instances decoration may also be matched to the interior decor of a room, i.e., to the context within which an object was used. These correlations of decoration with function and context correspond to Roman ideas of 'appropriateness' in decor and, in turn, contribute to the structuring of social identities and social relations in Late Antiquity.

Introduction

Interpretations of Roman decorative art tend to focus on either the symbolism of particular motifs,[1] on the use of particular styles or subjects to identify specific workshops,[2] or on the relationship between stylistic change and wider cultural and social change.[3] However, more recent treatments of the relationship between art and the viewer, firstly in Roman representational iconography, for instance by J. Elsner[4] and secondly in studies which focus on the non-representational art of other periods and cultures, such as those by O. Grabar and A. Gell,[5] prompt a different approach to Roman decorative art: examining the way that decoration can be actively used to enhance and sometimes

[1] See, for example, Wilson (1999) 11.
[2] Scholarship on Roman mosaics in Britain has largely taken this approach. See, for example, Neal (1981).
[3] Most notably by Riegl (1985).
[4] Elsner (1995).
[5] Grabar (1992); Gell (1998).

L. Lavan, E. Swift, and T. Putzeys (edd.) *Objects in Context, Objects in Use* (Late Antique Archaeology 5 – 2007) (Leiden 2007), pp. 385–409

even prescribes the practical role of the object within the social world. Gell argues that decoration is never arbitrary, but always has a social purpose. Sometimes this may be symbolic; the decoration may 'represent' something else. Yet it may also be functional; the decoration may have a practical purpose, affecting the interaction of the viewer with an object in a particular way.

This approach has already been applied in Roman domestic space, and an illustrative example may be found in the work of J. Clarke, who studied, at Pompeii and Ostia, how the decorative patterns on mosaic floors structure the movement of a visitor around a domestic house.[6] Axially arranged designs prompt the viewer towards doorways and views, while the relationship between the different patterns demarcates the dynamic and static quality of rooms and the public or private nature of different spaces within the villa. The actual patterns themselves are irrelevant; but a hierarchy of patterns can be demonstrated to exist, with simpler designs covering corridors and courtyards and more complex ones the viewing floors within rooms.

The potential of a wider examination of decoration in the Roman world becomes apparent when Roman ideas of decoration, and its purpose, are considered; in particular, the idea of 'appropriateness'; i.e., that decoration is always chosen to be 'suitable' in one way or another to the context in which it appears. In this way, the decoration on an object or within interior space plays a role in the embodiment or constitution of that object or space within the social context. A dining room may be recognised as such, may be deliberately constituted as such by the owner, through the commissioning of appropriate decoration; for example, scenes of feasting and drinking.

Vitruvius provides the clearest exposition of this in relation to interior decor,[7] basing his ideas upon the inherited Classical tradition.[8] His version of 'tradition' was in turn widely disseminated in the imperial period and beyond.[9] The application of the idea of appropriateness, if not the precise rules laid out by Vitruvius, can be traced widely through diverse media in the Roman world.[10] The social function of decora-

[6] One of his principal examples is the 2nd c. *Domus delle Muse*, Clarke (1991) 270–78. See also Wallace-Hadrill 1988.

[7] Rowland and Howe (1999).

[8] Rowland and Howe (1999) 18.

[9] Wilson Jones (2000) 35.

[10] Swift (forthcoming). On figurative decoration appropriate to room function, see Dunbabin (1978) 24; Winsor Leach (1982) 153–54; Thébert (1987) 367; Morand (1994) 138.

tion, as described by Gell, is to create interactions between objects and participants in the social world, and given the privileged position of decoration in Roman culture, its power to structure relationships constructed with objects, and in turn, relations between social actors mediated through objects, is immense.

Decoration will be particularly important, then, in the social context. The three primary areas of social display and conspicuous consumption in the Roman world are social space, entertainment, and dress.[11] Decoration in interior space, on dining and related equipment, and on dress accessories, may be suggested to be important in the constitution of social occasions and interrelationships between social actors. I explore these three areas at much greater length elsewhere.[12] The focus of this paper, whose content is largely drawn from this wider project, is on dining and related equipment in particular, in order to articulate with the theme of the current volume, objects in context and use.

There are a number of ways in which Gell's ideas concerning the practical roles of decoration may be applied to the decoration on vessels in the Roman period. These can be briefly summarised as follows.

1. Decoration is used to enhance the form of the vessel, for example a concentric design may be applied to a circular plate. Since form and function are intimately connected, the decoration that emphasises the form of the vessel—by drawing attention to the flat circular plane of a silver plate, for instance—also draws attention to its practical function.
2. Decorated objects are used as part of the elaborate rituals of dining to group together social categories and emphasise social hierarchies. For example, a 'set' of matching objects link together their users as a single social entity, while objects with varying decoration may be used to demarcate social hierarchies among the users.
3. Decoration is used to structure the way that objects may be arranged, for example in placements for display. Objects that occur in pairs with mirror-image decoration, for instance, cups, vases and jugs, provide many instances of this kind of relationship. In turn, the degree of formality of display exhibited by objects combines with other contextual aspects to constitute a social occasion as relatively

[11] Smith (1997) 5.
[12] Swift (forthcoming).

more or less structured and formal in itself, with the constraints on behaviour that this implies.

4. Decoration is used to indicate the intended contents or function of a vessel and thus its ideal use. This type of decoration is very common in the Roman world and includes inscriptions referring to contents, depictions of people using the object in the prescribed manner, and related iconography that refers more obliquely to the theme of the contents. Examples are found in all types of vessel, and in diverse contexts (discussed further below).
5. Decoration may have been used to create a relationship between an object and the room in which it was used. Well-documented examples are, however, rare, due to the way that most archaeological sites have been excavated and recorded.

I provide a more detailed exposition, which includes the analysis of particular examples in all of the above categories, elsewhere.[13] In this paper I will focus on the relationship between the decoration on a vessel and its contents, and the possible correspondence between decoration on a vessel and that within the room in which it may have been used. Both are trends that are evident in late antique material, taking a fairly broad definition of this period, from the 3rd c. onwards.

The Iconography of Decoration in Relation to Contents

Following trends in the earlier Roman period, in late silver plate, pottery and glass a connection between decoration and intended function can often be identified. An idea of the likely function can be gained from art-historical and written sources, and when this is compared with popular decorative themes, there is a striking correlation.

Jugs and cups, for example (surviving examples occurring predominantly in silver plate and glass), which are shown in art filled with water, or wine,[14] are repeatedly decorated with water or wine-related themes. Aquatic themes include dolphins, fish and other aquatic creatures, shells, harbour scenes, and Nilotic scenes. Examples may be drawn from the

[13] Swift (forthcoming).
[14] See, for example, Naumann-Steckner (1991) 95, pls. XXIIa, XXb.

extensive glass collection of the RGM Köln, for example, several 3rd c. glass cups decorated with dolphins; numerous others could be cited, including glass bottles that are themselves in the shape of fish and shells.[15] Themes relating to wine include Bacchic scenes, vine-scrolls and grapes, scenes of harvest and vintage, etc., Bacchic scenes, for instance, occur on the British Museum's Lycurgus cup, and scenes of cupids vintaging grapes are used as a theme on a silver flask from the Esquiline treasure.[16] Comparable to the water vessels above, glass bottles moulded in the form of bunches of grapes are also known.

In similar vein, *paterae* used for washing, as M. Mundell Mango notes,[17] are frequently decorated with aquatic themes, for example frogs, water birds, shells, fish, and marine mythology. Mundell Mango describes the 'frog' patera from the Carthage treasure now in the British Museum, which contains a plastically modelled frog crouched in the basin of the patera.

In a more explicit version of the relationship between decoration and use, sometimes not only does the theme of the decoration specify the intended function or activity, but an activity represented on an object replicates precisely the activity to which the object acts as an accessory in the real world. What is particularly interesting is the apparent desire often evidenced in this type of decorative scheme to situate contemporary practice in the context of established tradition, through the use of mythic or historic archetypes.[18] Elsner illustrates this trend through the consideration of a 6th c. liturgical vessel with an explicitly Christian theme.[19] A chalice, decorated with a picture of the Last Supper, both reminds the user of the original prototype and mimics the way that the chalice would be used in contemporary Christian ritual. It makes explicit the link with the event that is commemorated in the Christian Eucharist. Numerous further examples could be cited. Many instances of self-referential decoration, like the example cited by Elsner, come from later Roman religious contexts, both pagan and Christian, for instance,

[15] Whitehouse (2001) 199, cat. no. 754 illustrates a fish shaped flask of the 3rd c. and refers to 9 others known. A shell-shaped flask now in the British Museum is illustrated in Harden *et al.* (1968) cat. no. 65.

[16] Shelton (1981) 82–83, cat. no. 16, pl. 30.

[17] Mundell Mango (1994) 52.

[18] The use of such ideals in the Roman period is evident in other media. See, for example, Muth (1998) 228–43 on the construction, through mythic iconography, of ideal images of men and women.

[19] Elsner (1995) 266.

paterae with depictions of religious sacrifice found at temple sites,[20] the Walesby baptismal tank, with a depiction of a person receiving baptism upon it,[21] or Christian marriage rings, with the couple depicted upon them.[22] It might be suggested that the association, through decoration, of object with intended function is likely to be particularly strong in a religious context. In this type of setting, the decoration that is applied to the object (on the orders of the commissioner, who thus takes on a powerful role in this context), effectually reserves the item for a particular, ritual use; the decoration therefore has an active role, to transform the object into a ritual object, and to enhance the efficacy of any ritual performed with it.

Though self-referential decoration clearly has a particularly important function with respect to ritual vessels, representations of the intended function of an object on that object itself are also found more widely, and occur frequently in the secular and domestic sphere. The decoration on the equipment of secular dining and the toilet, for example, often uses as its theme mythical examples, which might be termed prototypes, which indicate the function of the vessel. For instance, as S. Martin-Kilcher notes, Venus, who was born in the sea, often decorates toilet items such as mirrors and *paterae*.[23] A late antique example is the so-called 'Petit Palais' *patera* from the Esquiline treasure, illustrated in fig. 1.[24] The *patera* is itself in the form of a shell, decorated with a border of miniature representations of the same shell. The interior of the *patera* bowl, meanwhile, contains a representation of Venus. She can be regarded as the mythical prototype for the construction of feminine beauty,[25] and her representation is also appropriate to a vessel used for water, since she was born in the sea, and is frequently shown rising from it. The decoration therefore clearly indicates that the vessel is a toilet article and that an appropriate action would be to use it for bodily ablutions as part of the feminine ritual of bathing

[20] Henig (1983).

[21] Watts (1988) 218 and Thomas (1981) 226 interpret the iconography of the tank as showing ritual preparatory to baptism.

[22] Hackens and Winkes (1983) cat. no. 42 shows a late 4th c. example from the Dumbarton Oaks Collection: a man and a woman facing one another, with a cross above. An example from Britain, described by Johns (1996) 53, comes from Brancaster and shows two engraved busts with the inscription '*VIVAS IN DEO*'.

[23] Martin-Kilcher (1989) 19.

[24] Shelton (1981) 78, cat. no. 3, pl. 21.

[25] Schneider (1983) 32–33.

Fig. 1 Petit Palais Patera, © Photothèque des Musées de la ville Paris.

and adornment. Another item in the Esquiline Treasure, the Projecta casket, is also decorated with a representation of Venus.[26] This item, too, can be regarded as a toilet item, since several analogous examples of caskets with jewels spilling from them are shown in contemporary representations (for example, the Trier palace wall-paintings).[27] The casket is appropriately decorated with the archetype of feminine beauty. This a particularly illuminating example, since Projecta herself, the owner of the casket, is also depicted, and explicitly mimics the actions of Venus—both Venus and Projecta are engaged in the ritual of bodily adornment, pinning up their hair (fig. 2).

In an extended discussion of representations of women in Roman literature, M. Wyke documents the central role of the toilet in the daily routine of a woman of elite status. Bathing, dressing the hair, adorning the body with unguents and cosmetics, and embellishing it with jewellery, were all expected activities, which could take up a large part of each morning. As Wyke explains, the practice of body care and the use of cosmetics and jewellery constituted the Roman woman as a bodily creature displaying herself for male eyes.[28] The construction

Fig. 2 Projecta casket, Esquiline Treasure, © British Museum, London.

[26] Shelton (1981) 72–75, cat. no. 1, pls. 1–11.
[27] Kempf (1950) Beilage 3–5.
[28] Wyke (1994) 134–35.

of the elite woman through her toilet, described by Wyke for the high imperial period, evidently continued in Late Antiquity, to judge by commentators such as John Chrysostom and Jerome, who assess an elite woman's morality through reference to her dress and practices of adornment.[29] Chrysostom in particular demonstrates his perception of the vital function of jewellery and the toilet in the construction of elite female identity, including an awareness of the role of the audience—without it adornment, he notes, is useless.[30]

Elsner shows how Wyke's ideas apply to the Projecta casket, in that the iconography can be interpreted as the construction of woman for the male gaze.[31] He argues, however, for a multiplicity of viewings, in which the woman herself might regard the casket as exemplifying her own seductive power. He draws a contrast between Projecta, adorned, and Venus, naked, suggesting that in the depiction of Venus unclothed lies also the promise of Projecta unclothed and the central role of desire within marriage;[32] and that there is a reflexivity between the depictions of the adorned, clothed body and naked female body free of cosmetics and embellishments. However, while the casket may indeed be understood as exemplifying, to women, their own seductive power, and while it is undoubtedly concerned with a rhetoric of adornment found also in the literature of the Roman world, the prominence which Elsner accords, among its multiplicity of messages, to the theme of erotic desire, and, specifically, the suggested oscillation in the iconography between nakedness and adornment, can be questioned. Venus, while partially unclothed, is in the process of *adornment*; she looks in the mirror to check her appearance while inserting a hairpin into her hair; servants bring a jewel casket. Her nakedness is her normal state; she is 'clothed' appropriately to her role, as Projecta is.

Given also the widespread incidence of self-referential decoration cited above, in which the decoration straightforwardly refers to the activity for which an object is intended, and also, perhaps, the practice

[29] See Harlow in this volume; Clarke (1993) 111–17. Hartney (2002) provides an extended examination of Chrysostom's views on female dress.

[30] Hartney (2002) 245–46; 249.

[31] Elsner (2003) 31. See also Schneider (1983) 33.

[32] The casket has often been interpreted as a marriage present on the grounds of the inscription and complete iconographic scheme. Though previous suggestions that part of the marriage ritual itself is depicted on the back of the casket have been refuted [Shelton (1981) 27–28], Vikan (1990) 151 confirms the frequency of couple portraits in art related to Late Roman marriage.

of the customising of mythical themes in iconography to a particular purpose, thereby only *selectively* drawing upon the attributes of mythical figures, as argued by P. Zanker,[33] Venus, depicted on a toilet article, was, it can be suggested, *primarily* understood by the viewer to manifest beauty and femininity, as part of the expected feminine role of the married woman in relation to her husband.[34] The dominant message of the iconography is more an exhortation to similitude (to the woman, to become, through adornment, as beautiful as Venus), than a promise of nakedness, of erotic desire, beneath the clothed rectitude of the Roman matron, though this sub-text may still of course be present. The routine of toilet and adornment, central to the construction of a social and sexual female identity evident through a consideration of literary texts[35] is in some sense, therefore 'prescribed' by the toilet object itself (and, therefore, by the culture that brought the object into existence). The cultural elite uses the object and its decoration to implement its values. The decoration is used to ground conventional gendered practice in ancient tradition, using a prototype from the mythological realm.

K. Shelton suggests that Venus represents a 'visual simile' of the Roman woman's toilet.[36] The decoration, however, does not merely reflect elite cultural practice; it provides an exemplar to follow.[37] Zanker has argued that, in the Roman world (also including Late Antiquity) a mythical subject was sometimes used by the viewer to compare him or herself to a particular, mythic ideal. By viewing appropriate mythical scenes, which could be related to his or her own real-life situation, the viewer embodies aspects of the myth in his or her own life.[38] Similarly, in this case, Venus, engaged in her toilet, becomes the ultimate prototype for the lady of the house. The woman who views and uses the casket in fact becomes like Venus. Using Gell's idea of the false mirror, a representation which shows what ought to be, and therefore helps to bring it about by 'reflecting' back to (transferring to) the mind of the

[33] Zanker and Ewald (2004); see also Zanker (1999) for a discussion of the role of mythical scenes within the domestic context.

[34] Shelton (1981) 28 suggests that the procession on the back, interpreted as a procession to the baths, represents the toilet of the bride the evening before her marriage; it has also been interpreted as the bride arriving at her new domain, the house of her husband, Schneider (1983) 16–24. For the way in which myth exemplifies ideal male and female roles, see Muth (1998) 228–43.

[35] Wyke (1994) 134.

[36] Shelton (1981) 27.

[37] Schneider (1983) 32–34 dicusses Venus as a role model on the Projecta casket.

[38] Zanker (1999) 40–42; see also Zanker and Ewald (2004).

viewer a desired situation or emotion,[39] the decoration also functions to transform the woman into her ideal version as depicted on the object itself. Through the action culturally prescribed in decoration, she follows the prototype, and becomes ideal in her femininity.

Bodily adornment was, in addition, not merely a gender-specific activity, emphasising the woman's opposite qualities to that of the man, but was also an elite performance. One of the principal roles of the elite woman was the display of her husband's wealth. The representation of a woman adorning herself with jewellery, for example, is a frequent choice for depictions of the late antique elite female.[40] Other possessions were similarly used. K. Dunbabin, for instance, describes the way that silver toilet vessels would be paraded around in public, for example at the baths.[41] A woman's conspicuous consumption of wealth in luxury commodities emphasised the disposability of her husband's income. The time that she could afford to spend on adornment and embellishment of her body was also, of course, an indication of her elite status, and this is well attested by the popularity of very time-consuming and complicated routines of ablution and adornment among the elite, such as the extravagant hairstyles of the late 1st and early 2nd c. Luxury articles therefore had a central role to play in the elite 'performance' of wealth, as Wyke notes.[42]

The ideal masculine role, in the late antique period, that of *dominus*, is also acted out through the use of decorated vessels, in this case, the decorative schemes that adorn vessels within the dining context. In general, some decorative themes on dining vessels and, more often, on mosaics, can be shown to exemplify the power and wealth of the *dominus* through representations of his property.[43] In his discussion of the Cesena plate, for example (which is very similar to the Sevso plate, below, in its depiction of hunting and dining scenes), and other mosaic examples of the hunt, L. Schneider focuses on the themes of property and the dominion of the natural world. The depiction of the owner among the bounty of his estate reinforces the entitlement of the owner

[39] See Gell (1998) 31–32.
[40] Warland (1994) 196–200.
[41] Dunbabin (2003) 461.
[42] Wyke (1994) 141–42. See also, for Late Antiquity, Hartney (2002) 251 on awareness, for example in John Chrysostom, of the woman's role in displaying her husband's wealth.
[43] Schneider (1983) 123.

to his worldly goods, and, simultaneously, mirrors the dominion of the Emperor over the world, his empire.[44]

This type of theme being used on dining vessels of course brings in another dimension: how the actual food on the plates would be regarded in juxtaposition to such scenes. A dish from Graincourt, dated by Baratte to the second half of the 3rd c. (fig. 3),[45] is a useful example. The large, shallow dish is plain with a central decorated roundel, and decorated rim, both in shallow relief. The roundel contains a depiction of sea life, and the rim shows both animal and marine life. The importance lies in the detail of the representation, however; the items are clearly depicted primarily as produce; for example, in the central roundel, containing fish, squid, shells and a lobster, some of the fish are contained within baskets, and two water-fowl hang up by the neck. This theme of the abundance of nature as a larder of goods for human consumption is repeated in the rim decoration. Living fish and fowl are juxtaposed with baskets of eggs, fish, and shellfish, pointed amphorae, and a repeated motif of an animal carcass, legs bound, lying on a table-top. The iconography forms a running commentary on the dining experience by showing that the meal itself is merely the final 'illustration' of Roman power over, and rights to, the natural world. In this particular case, following Schneider,[46] the power is also to be understood as that of the *dominus*, who provides the food for his guests.

Another example can be drawn from the 4th c. Sevso treasure. The so-called 'hunting plate' has a narrative format, in which hunt scenes for deer and boar, and riverine fishing scenes, are juxtaposed with the succeeding preparation of the carcasses and the al fresco dinner that results.[47] This is an illuminating example, since it explicitly links the theme of the hunt to the subsequent dining scene (irrespective of whether the products of the hunt would actually have been eaten in real life). It suggests that other hunt scenes, a very common theme on dining equipment in a range of media (F. Baratte catalogues a range of examples)[48] and also popular as a theme in late antique mosaic floors, can also be interpreted as part of a narrative of ideal dining,

[44] Schneider (1983) 113–51. See also Reece (1997) for a useful commentary and summary.
[45] Baratte (1989) 87, cat. no. 138.
[46] Schneider (1983).
[47] See Vroom in this volume figs. 6.1–2.
[48] Baratte (1989).

Fig. 3 Graincourt dish, © RMN M.Beck-Coppola, Paris.

as well as being intended to display the power of the landowner and the wealth of his estate.[49]

In addition to their illustration of the power and wealth of the *dominus*, the material objects and their decoration, also suggest a way in which social identities are to be ideally *played out* in the setting of an artificial, ideal 'leisure'. In a society in which patronage and client-patron relationships played such an important role, there was a reflexive relationship between demonstrating an entitlement to one's social position, and actually maintaining that entitlement; the performance of wealth and the demonstration of social position ensured

[49] See also Morand (1994) 12–13 who views the hunt as an illustration of the way in which the *dominus* subdues the natural world, ensuring peace and prosperity in his domain.

the continued support of clients, and, in turn, a large entourage of clients was essential to maintain power, political influence, and social position.[50] Formal dining in Late Antiquity was primarily a forum for this kind of social display; its role in the performance of wealth has been emphasised by previous scholars.[51]

In this context, the decoration of the objects provides the figurative prototype for appropriate social display and the maintenance of status. Activities may be recreated through the actual use of objects in the manner that the decoration suggests, in the performance, through lived practice, of carefully prescribed and appropriate social identities; conversely, the mere display of the objects suggests the potentiality for such activities, without their needing to actually take place. The decoration suggests to the viewer that they are eating the bounty of the estate and the product of the hunt, whether or not this is actually the case.

It is in fact remarkable how often representations of the *dominus*, elite couple, or family group, explicitly marked out with the specific insiginia of their status,[52] occur in the iconography of Late Antiquity. Such representations are found in mosaic and wall-paintings as well as on objects to be used within the social context such as silver plate or jewellery.[53] Late antique society was preoccupied by distinctions of rank and social position, and shows a corresponding obsession with its representation, now increasingly displayed within a domestic setting.[54] As mentioned above, to the examples so far cited in silver plate, of the Projecta casket, Cesena plate,[55] and Sevso hunting plate, can be added many instances of mosaic representation showing the elite couple receiving audience or going about their daily activities at their villa estate.[56] These elite self-representations[57] are *constructed* accounts of daily life,

[50] Wallace-Hadrill (1989) 82–83. The client-patron relationship was important throughout the Roman period and is also attested in Late Antiquity; Wallace-Hadrill (1989) 64.

[51] See Thébert (1987) 368–71 on the dining experience as 'theatre'.

[52] Warland (1994) 179.

[53] Warland (1994) discusses some instances in mosaic, wall-painting, and silverplate.

[54] Muth (1998) 348–49. Depictions of the elite couple are also found often in funerary contexts. See Warland (1994) for a discussion of the iconographic programmes at Silistra and Centcelles.

[55] Toynbee and Painter (1986) 20; see also Schneider (1983) 113–51.

[56] See Dunbabin (1978) 62–64 on mosaic representations of villa estates in North Africa.

[57] As argued by Morand (1994) 172–73 with respect to mosaic scenes of villa life.

(for example, they emphasise some activities, and omit others) yet to the viewer, they apparently show 'reality', eliding the distance between the real elite couple and their ideal representation. They exemplify, in fact, Gell's idea of the 'false mirror' that, by showing an intended version of reality, helps to bring that reality about in the mind of the viewer.[58] The elite couple, in this case, become their ideal version by viewing and utilising the objects on which they are represented. They use the decoration to make themselves perfect, in their own eyes and in the eyes of others within the social context.

Situating the elite couple within the narrative of the decoration itself (characteristic of late antique silver plate such as the Sevso and Esquiline treasures) or setting the food on the plates in the context of the representation of the hunt, and, in this way, conflating real with ideal and mythical life, to use I. Hodder's term, 'naturalises the present'[59] disguising the arbitrariness of social practice and constituting it as expected behaviour that is taken for granted by those within the social context. It is also useful here to bring in recent discussions of materiality.[60] That the decorated vessels can be used to act out in practice the social rituals that they prescribe, and the very fact of their durability and concreteness as objects, gives social convention a correspondent concreteness which a mere written rule could not achieve.

The Relationship Between Decoration and Interior Décor

The appropriateness of certain themes to both the dining context and the equipment of dining is exemplified by their widespread occurrence in Late Antiquity in both mosaics in the main dining rooms of Roman villas and in the decoration of vessels. For example, the popularity of hunting scenes on the mosaic floors of 4th c. Roman villas in Britain and other areas of the empire[61] is mimicked in the decoration of glass, pottery and silver plate with themes of the hunt.

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[58] Gell (1998) 31.
[59] Hodder and Hutson (2003) 85; Giddens (1979).
[60] Hodder and Hutson (2003) 66–67.
[61] See, for example, Dunbabin (1978) 46–64 on hunt scenes in the mosaics of Roman North Africa; they were particularly popular in this province.

Plates with purely geometric ornament, and, in particular, large serving plates ornamented with octagons or roundels closely mimicking areas of mosaic flooring can be shown to date to the late 3rd c. onwards, an era when geometric decoration was particularly prestigious, and much favoured for the floors of large formal dining rooms. Fig. 4 shows an example, the Soissons plate.[62] A mosaic floor from Salzburg, fig. 5, illustrates the close relationship with silver vessel decoration.[63] Several authors, for example Baratte,[64] have made the observation that the initial inspiration for geometric vessel decoration came from the patterns used in mosaic floors. It is possible that such decoration on silver vessels could be used expressly to link the vessel to the room in which it was used; vessels with geometric designs would be appropriately situated in a room with a geometric mosaic floor, perhaps even one of identical design.

The occurrence of complete decorated vessels in the archaeological context of the decorated rooms in which they were used is frustratingly small. Two examples of specific evidence relating to finds within particular contexts may be cited; though there are problems with the archaeological context in each case, a lack of other suitable extant material prompts their consideration. In each, the decoration on a vessel *might* have been intended to deliberately to replicate an interior decorative scheme. Both are from Rome; the first from the villa beneath San Giovanni e Paolo, Rome. A glass dish, of 4th c. style, with incised wheel-cut decoration, was found in 1909 in Room 22 of the villa. It is decorated with a theme of fishermen and cupids flanking a central scene with a group of three figures.[65] This parallels exactly the decorative scheme of the wall-paintings which may be viewed still extant in the room, and which date to the end of the 3rd c. The rooms were excavated at the end of the 19th and beginning of the 20th centuries; the vestibule of the house was re-used in the Early Medieval period, and it is therefore likely that the archaeological context of the other rooms may have been disturbed.[66] However, the independent stylistic dating of the glass dish at least suggests that it comes from the period

[62] Baratte (1989) cat. no. 124.
[63] Balmelle *et al.* (1985) 270, pl. 175f. Balmelle *et al.* (1985) catalogue many other examples of similar geometric floors. See also Balmelle *et al.* (2002).
[64] Baratte (1989) 177.
[65] No. 96 in the museum.
[66] See Coarelli (2004) 9.

Fig. 4 Soissons plate, © Musée de Soissons.

of occupation of the villa and is therefore a likely possession of the Roman house. It seems possible that, during the period of Roman occupation of the house, the glass dish was commissioned to match the interior decor, and was displayed or used in this room. The second example is the Mausoleum of Constantina, still extant and now known as Santa Constanza, and its porphyry sarcophagus.[67] This, of course, moves well beyond the general domestic theme of this paper, yet it is included here for two reasons. Firstly, because of the general paucity of evidence of decorated dining vessels found in context; and secondly, because it is a specific case in which it seems quite likely that the sarcophagus, and the mosaic within the building in which it was housed, the Mausoleum of Constantina, were deliberately designed to match one another.

The sarcophagus is currently located in the Vatican museums, where the iconography may be studied in detail. Previous to this it was housed

[67] It has been widely accepted that it dates to the first half of the 4th c. and that it was intended for the daughter of Constantine the Great, though recent work by Stanley (1994) suggests it may be of a later date, and that Constantina may have initially been buried within the nave of the main cemetery church.

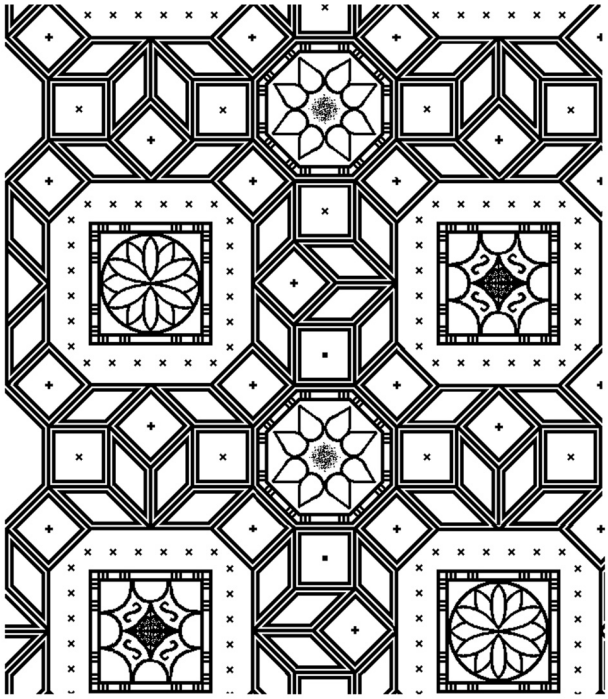

Fig. 5 Mosaic floor with geometric decoration from Salzburg, redrawn by James Bland (simplified) after Balmelle *et al.* (1985) 270, pl. 175f.

within the mausoleum and this is widely accepted as its original location, on the basis of Medieval records of its whereabouts.[68] A replica is to be found in the mausoleum, and from the architectural setting and hierarchical scheme of decoration, it can be assumed that this is in the same location as the original sarcophagus, at the centre of the rear wall. The mausoleum itself still contains the original mosaics in the vault, though they have been heavily restored. The mosaics progress around the ambulatory from geometric designs to figurative scenes with a common theme. At the rear of the building, the ambulatory vault mosaic is of vintaging scenes and vegetative designs of vine-scrolls and leaves. Above the sarcophagus, strewn branches combined with birds and silver vessels haphazardly distributed evoke paradise, in a mosaic

[68] Sjoqvist and Westholm (1935) discuss the evidence, drawing upon the appropriate textual sources.

type derived from floor mosaics strewn with branches.[69] The subject matter includes doves at a fountain, pine-cones, and peacocks, all motifs which have been associated with both Christian and pagan funerary and redemptive symbolism. The two panels flanking the sarcophagus are those showing the harvest of grapes and vintaging erotes (fig. 6 shows one of these panels). Turning to the decoration of the sarcophagus, the iconography is replicated in detail. The panel on the front of the sarcophagus depicts erotes picking grapes to left and right, while vintaging erotes trample the grapes into wine in the centre. Beneath, two peacocks face one another. Vintaging erotes are also shown on the two ends of the sarcophagus, treading the grape-juice from the grapes, which flows into jars beneath (fig. 7).

From these examples, it seems possible that in some instances interior schemes of decor and the decoration on vessels such as silver plate may have been designed to match one another, particularly the hunt scenes and geometric designs so popular in Late Antiquity. It could also be possible that items were designed to match other furnishings such as curtains and drapes; fabric designs that survive from Late Antiquity reveal many of the same decorative motifs as those found in mosaic and silver plate.[70] In the case of the mausoleum and sarcophagus of Constantia, the decorative scheme is both carefully matched, and simultaneously, of perfect appropriateness, in symbolic terms, for its funerary setting. The elite context suggests that such attention to detail was highly valued in late antique culture. Returning to the domestic context, the possibility of matched geometric designs on plate and mosaic suggests, meanwhile, that late antique silver plate was in some instances designed primarily with its display purposes, rather than its functional use as dining equipment, in mind.

The possible instances of matched decor in different media, and, more certainly, the widespread evidence of 'appropriate' decoration in general, reveal the ordered nature of the Roman social setting. Matched decor might entail considerable expense, especially if matched items were all commissioned simultaneously. It therefore indexes the wealth, power, and cultural capital of the owner, the agent who can bring this about. For those using objects matched through decoration to either their surroundings, or to the functional purpose of the object itself, the

[69] Dunbabin (1999) 249.
[70] See, for example, Trilling (1982).

Fig. 6 Mausoleum of Constantia, vault mosaic with vintaging erotes, © DAI Rome.

Fig. 7 Sarcophagus of Constantia, end detail, © DAI Rome.

items would attest to both the wealth and power of the owner, and their cultural sophistication. The careful selection of appropriate decor would also assist in constituting formal social settings, or particular social occasions, as suitably grand, and the constraints expressed through decoration might be reflected in, and have an effect upon, social performance within a particular setting. It is well-illustrated from previous studies that the Late Roman dining experience was one of constrained artificiality and regulated behaviour.[71] It might be suggested that the formality of a setting, created, partly, through decoration (together with other elements, e.g., the prescription of appropriate dress, or the serving of particular foods), would be a contributing factor in this social control, having an inevitable subconscious effect upon behaviour within that context, indeed, perhaps eliciting a corresponding formality of social behaviour.

Actual Versus Ideal Use

The social rules and norms established by participants within elite culture exemplified by decoration on vessels, and acted out through their use, may, of course, not always have been followed. Were vessels with watery themes carefully set aside for water, or was use of vessels to contain liquids, in practice, often rather indiscriminate? Were objects which show scenes of dining always used in the dining room? Were items decorated with representations of Venus always used by women? In the future, careful controlled excavation and recording of objects from within late antique domestic contexts may make a valuable contribution to this discussion, though some questions will always remain unanswerable; the value of silver plate, and therefore its prevalence in hoard contexts, means that definitive evidence from archaeological contexts of its domestic context of use is not likely to be forthcoming; in addition, pinpointing the (inevitably) final use of an object does not tell the archaeologist about all the other uses it may have had. P. Allison (1993), admittedly for much earlier, Pompeiian contexts, has shown that domestic room-use was mutable and that objects are not always found where we might expect them, attesting to the flexibility both of functional space and functional objects, and introducing an

[71] Ellis (1997) 50–51; Thébert (1987) 369–73.

element of caution into our interpretations.[72] There are also countless anthropological examples of items being appropriated or adapted for different purposes from that for which they were designed.

Yet evidence that objects or rooms had mutable functions does not preclude them being used often for their original purpose, the purpose for which they were designed (perhaps particularly so on particular formal occasions such as social dining, when no other equipment or space would have met the requirements of the dinner).[73] Ultimately the use of an object or space depends on the possible behaviours of the person who encounters the room or object on a particular occasion, and their own social and cultural conditioning. As H. Lefebvre remarks,[74] with respect to interior space, if the experience of a space conforms to the expectations/imaginings of the viewer, they may passively accept, and, by implication, act out and constitute through practice, what is imposed upon them by design. Within the late antique cultural milieu, it might be suggested, similarly, that objects are more likely to have been used for the most part according to their intended functions than not, especially given the cultural background, of the concept of 'appropriateness' referred to above (though they might be used quite differently in an alien cultural context).

However, it is possible that objects were on occasion not used in the manner prescribed by the decoration. If the prescriptions established by decoration were quite strong, knowingly using the items against their intended use could be a deliberate refusal to conform, perhaps a studied disregard for what was perceived to be 'outdated' social convention. On the other hand, the use of a toilet object, for example, for eating from, could index an informal or private occasion through the transgression. In each case, the action is seen against the background of the ideal use prescribed by the commissioners of the decoration, who apparently had a specific purpose in mind when the item was made, and the decoration therefore still has an active role, in constituting the action as transgressive in some way.

[72] Allison (1993).

[73] See, for example, Thébert (1987) for the social context of dining in Late Roman North Africa.

[74] Lefebvre (1991) 43–44.

Conclusion

Decoration on vessels forms a series of elaborate social codes relating to their practical use. Far from being 'mere decoration' the ornamentation on vessels indicates both what the items are for and how they are to be used; in the construction and perpetuation of conventional Roman social practices which perpetuate the illusion of an ideal society of leisure and wealth, with strongly prescribed social identities and roles. The setting up, through decoration, of conventions in cultural practice, attests to the significant role of decorated material culture within the Roman world, which, it might be suggested, is actively used by the elite in structuring social relations through interaction within the social context.

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SHOPS AND WORKSHOPS

SHOPPING, EATING, AND DRINKING AT DURA-EUROPOS: RECONSTRUCTING CONTEXTS

J. A. Baird

Abstract

The site of Dura-Europos, excavated in the 1920s and 30s but never completely published, has long been of archaeological interest for its exceptional preservation. This article questions the original identifications of the excavators of houses and shops, explores what can be learned about commercial buildings at the site from the re-contextualisation of artefacts, and examines how this information can add to our understanding of life at Dura.

Introduction: The Site of Dura-europos

Dura-Europos lies on the middle Euphrates River in eastern Syria. A Hellenistic foundation, the city was controlled by the Parthians from *ca.* 113 B.C. until A.D. 165, save an apparently brief Roman occupation under Trajan *ca.* A.D. 115–17, of which a triumphal arch outside the city is one of the only traces.[1] The city was taken again by Rome in A.D. 165, and is usually thought to have been completely abandoned after its capture by the Sassanians in about A.D. 256.[2]

Dura was rediscovered in 1920; wall paintings uncovered at the site roused immediate interest among archaeologists and the public alike. After some initial investigations,[3] the site was excavated for two seasons by F. Cumont for the *Académie des inscriptions et belles-lettres*.[4] A further 10 seasons of excavation began in 1928, conducted by a joint expedition of Yale University and the *Académie des inscriptions et belles-lettres* under

[1] Baur and Rostovtzeff (1929) 6–7; Baur, Rostovtzeff and Bellinger (1932) 17; Baur, Rostovtzeff and Bellinger (1933) 55–68.
[2] Amm. Marc. XXIV. 1, 5; James (1985).
[3] Breasted (1924).
[4] Cumont (1926).

L. Lavan, E. Swift, and T. Putzeys (edd.) *Objects in Context, Objects in Use* (Late Antique Archaeology 5 – 2007) (Leiden 2007), pp. 413–437

the scientific direction of M. Rostovtzeff, revealing more than a third of the site. The documentation of the excavations is held primarily by the Yale University Art Gallery.

The archive deposited at the Yale University Art Gallery includes many unpublished records. Notable among these were the field object registers, which record the original find-spot for thousands of artefacts. While the context of many of the artefacts was recorded in the field, only the finds deemed most impressive, generally in an art-historical sense, were published. The preservation of the excavation records of Dura means that it is possible to re-contextualise these artefacts and partially re-create the assemblages, as has been done at Pompeii by P. Allison.[5] The results here are the product of a larger study that re-examined all of the houses of Dura and the associated artefact assemblages.[6] This included the production of a database from the object registers, and included all of the objects with recorded provenience for the entire site, as the identifications of many structures as houses or other buildings were not certain. During the course of that study, it became clear that many houses considered to be domestic structures and originally labelled as houses were either attached to commercial premises, or had a primarily commercial function. Similarly, the numerous small shops excavated received virtually no notice in the publications. While the following is not meant to be an exhaustive study of the commercial buildings of Dura-Europos, it aims to highlight some examples, problems, and solutions with regard to their identification and the use of artefact assemblages. The rigid separation between commercial and private space is a modern construction; many households were probably involved in production for use beyond their own, and while household production is not the topic of the present study it should be noted that this was an important part of the productive capacity of the city.[7] Many locations at Dura were doubtless used for conducting business—within houses and even in open spaces, for instance within the agora area, and particularly in the colonnaded space of block G6.

[5] Allison's PhD is frequently cited and has now been published in monograph form; Allison (2004).

[6] Baird (2006).

[7] For instance, a low rubble parapet with a u-shaped depression in front of it was found in house G1–B, which was interpreted as the equipment for the loom and wool-dyeing; Rostovtzeff (1934) 53; Rostovtzeff *et al.* (1944) 146. Moulds, indicating a repetition of production for a number of objects including terracotta figurines, lamps, jewellery, and metal vessels, were also found in the house.

These spaces however are much more difficult to recover particularly given the archaeological record of Dura. The excavations conducted by the Yale expedition were not of the sort that would have picked up evidence for post-holes or other signs of temporary structures that may have been erected in the agora.

One of the types of data sadly missing from the Dura assemblage is the ceramic records. Visible today at Dura, in Yale's excavation backfill, are hundreds of thousands of sherds—only complete vessels or sherds of particular interest (generally those which were stamped, inscribed, or painted) were kept and catalogued by the Yale team, and the wealth of information that could have been gained from an examination of this pottery is lost forever. This was typical practice at the time of excavation but seriously hinders many modern forms of interpretation.[8] However, as large vessels such as *pithoi* and *dolia* were often left *in situ*, they were recorded on the plans made by the Yale team and hence can be referred to, and these are useful for the identification of commercial establishments. Other data used here includes unpublished plans, photographs, and field notebooks, all held by Yale, as well as new work in the field with the *Mission Franco-Syrienne de Doura-Europos*.[9]

'Shops'

At Dura, virtually any room which opens directly on the street has been identified as a 'shop' by the original excavators. While these were labelled on the plans produced of the site, no justification was given for this identification; the understanding seems to have been implicit, based on an architectural typology never made explicit. If 'shop' is given a broad definition as a locale for primarily commercial activity of whatever sort, the method of identification used is generally a valid one, particularly as the private residences of Dura have a characteristic entrance via an 'elbow-turn', which serves the opposite purpose, that is, to isolate and hide the interior of the house from the street, with

[8] Some of the pottery was published in several fascicules of the Final Reports series. However, from a quantitative standpoint these are all but useless and are heavily biased with material from the necropolis, which was the main source of complete ceramics; Cox (1949); Dyson (1968); Toll (1943).

[9] The results from these excavations have been published in *Doura-Europos Études:* Leriche (1986); Leriche (1988); Leriche (1992); Leriche and Gelin (1997); Leriche, Gelin and Dandrau (2004).

an L-shaped entrance corridor. Among the rooms designated 'shops' by the original excavators were those likely to have been both spaces exclusively for retail and workshops in which goods were also sold. There is a possibility that many of these single or double room structures classed as shops were store-rooms, or workshops, but given the paucity of evidence for most, this is uncertain. Among the many shops with no recorded finds doubtless remain those which were food and drink establishments, and those with any number of other functions, now unrecoverable. However, where there are enough artefacts to draw inferences, the structures can all be shown to be shops. As will be discussed, many shops which existed in the final phase of Dura's existence were at one time part of domestic structures, and were later cut off to greater and lesser extents, with some still being accessible from within an adjoining house and others accessible only from the street.

At Dura, 164 shops excavated by the Yale expedition are visible on the published and unpublished plans; of those, only 75 have recorded artefacts, and of those, only a handful have enough artefacts to be able to identify their specific use with any certainty. Similarly, only 31 of the excavated shops were recorded in any way aside from the plan, either in the *Preliminary Reports* or in notes kept at Yale—and even most of those were very brief. The evidence then is limited by the nature of the recording of the original expedition, and the survival of some field records;[10] however, the number of excavated shops, which would take years to excavate using modern techniques, makes them a worthwhile topic of study. The present study does not cover the early shops at Dura, such as those beneath the later agora buildings, dated to the Hellenistic period, or other shops which changed in function in the final period of the city.[11] Not only is there a paucity of archaeological data

[10] Several of the notebooks of the Dura expedition were lost shortly after the excavations ended. Correspondence held at YUAG shows that already by the 1960s they were gone. These included most notes of the final seasons, particularly pertinent to the present study as these would have included most of Brown's notes on the agora. An account of the 10th season of work, for which a preliminary report was never published, has been pieced together by S. Matheson; Matheson (1992).

[11] This paper excludes for instance several shops that were subsumed into houses, with their street entrances closed off, such as D5–E15 and D5–E10. Poorly preserved remains thought to have been of shops were also revealed by the Yale expedition adjacent to their expedition house in block C10; these too are not included as nothing else is known of them save their rough indication on the plan of B2 made by H. Pearson. Outside the agora, very few early shops are known, save several units

for these, particularly outside the agora, but most also fall well outside the chronological scope of the current volume.

The shops of Dura were typically deeper than they were wide, *ca.* 2 × 4 m for one-room, although these dimensions do vary, particularly when shops consist of more than one room. Of the 164 known shops, just over 80% were a single room, and 16% were two rooms; just over 1% comprised three rooms, while a little more than 2% are of uncertain number, having been only partially excavated. It is not difficult to imagine however that many shops, particularly those with a covered colonnaded area in front of them, would have taken advantage also of the space immediately in front of their doors, expanding the amount of space each had access to.

While many parchments, papyri, and graffiti were recovered at Dura, only a brief direct mention is recorded of a shop; this is of a potter's shop in P. Dura 126, which unfortunately gives no details of its physical nature, other than alluding to the work of the potter and the selling of the pots happening at the same location.[12] The other fascinating textual evidence from Dura attesting to the nature of the shops, and indeed the connection between shops and houses, comes from one house, designated B8–H.

House B8–H, also known for its eponymous owner as the 'house of Nebuchelus,' had several attached shops; located just to the east of a monumental arch on the main east-west street of the city, many graffiti were recovered, scratched into the plastered walls of the house and attesting to the business dealings of its owner (fig. 1).[13] These texts have

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thought to have been shops beneath the later precinct of the Temple of the Gaddé in block H1; Rostovtzeff, Brown and Welles (1936) 234. On the Hellenistic shops of the agora, see Rostovtzeff *et al.* (1944) 15–19.

[12] On the distribution of kilns, including those for production of ceramics, see Allara (1994). To Allara's list should be added the recently excavated kiln in block C11. The parchments and papyri were published by Welles, Fink and Gilliam (1959). While P. Dura 126 is the only direct mention of a shop, many of the parchments and papyri record transactions, commodities, and other aspects of commercial life at Dura. The same is true of the graffiti, which were generally published in the preliminary reports.

[13] The house is technically house B8–H within the site-wide numbering scheme, and in the preliminary reports is variously referred to as the 'house of the clothes merchant' and the 'house of the archives'. The pictorial graffiti from this house were published by Goldman, who erroneously refers to it as 'house 17'; Goldman (1999). While several plans of this block were published, by far the most accurate and legible is an unpublished plan by H. Pearson held at the Yale University Art Gallery; Baur, Rostovtzeff and Bellinger (1933) pl. 16.1; Rostovtzeff and Welles (1931) 163.

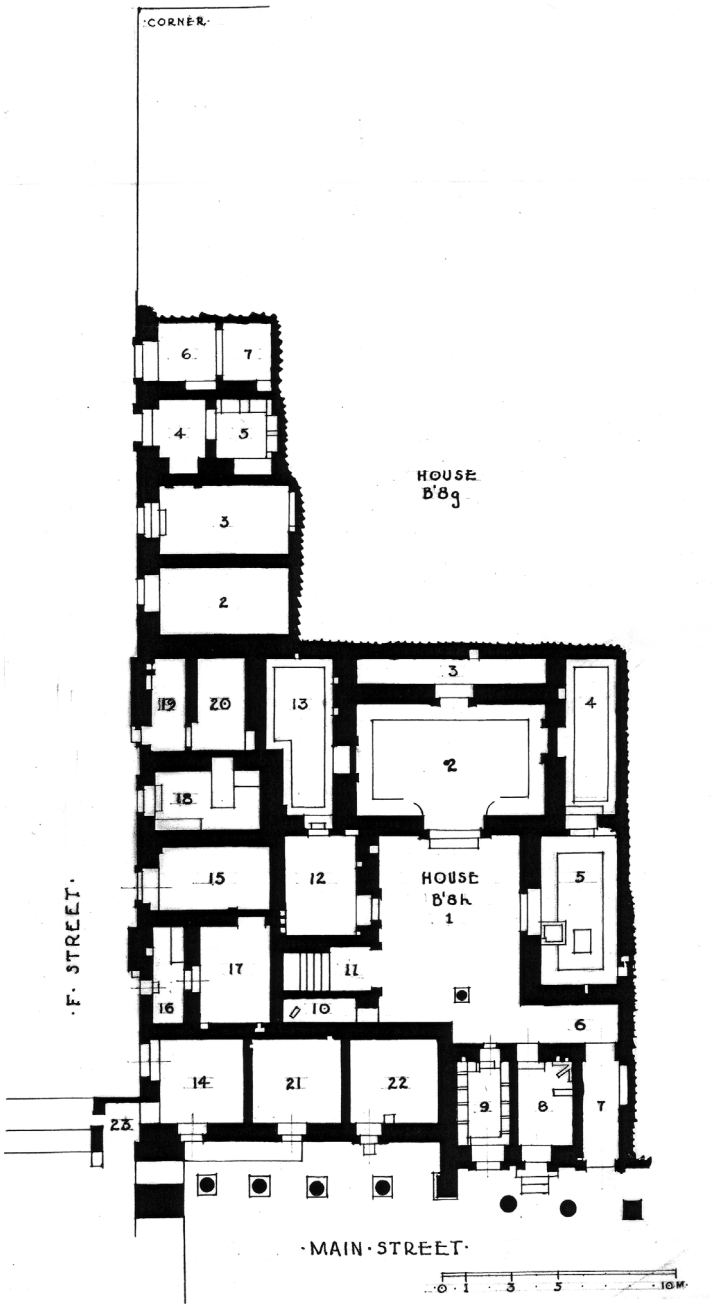

Fig. 1 Plan of excavated portion of block B8, by Henry Pearson (Yale University Art Gallery).

been dealt with elsewhere, and the dealings of Nebuchelus have been shown to extend well beyond the two shops that communicated with his house—and the 7 others immediately adjacent which might also have fallen under his control[14]—into agriculture, trade, and money-lending.[15] The shops of this block were not described in the publication, but in the archives there are plans, limited notes in the 1931 notebook of C. Hopkins, and artefact records. As elsewhere in the records, there is uneven recovery from the shops of B8, but there is good evidence for at least one specialised shop from this block. Shop B8–G2 appears to have been selling lamps; of the 48 objects from it, all are lamps, lamp fragments, or coins. The lamps are all of roughly the same date, the 1st half or middle of the 3rd c. A.D., and 'Roman' or imitations of 'Roman' in type, according to the typology developed by P. Baur in the final report on the subject.[16] While none of the other shops in the block have a great enough number of finds to testify to their specific function, artefacts such as copper alloy weighing scale fragments allude to their commercial functions, as do amphorae reportedly built into the floors of shops 14, 21, and 22.[17]

From the object records, it is possible to locate only a small number of other seemingly specialised shops; the others have either no artefacts recorded or so few as to defy even a speculative interpretation.[18] For instance, shop G1–114/118, in the agora, probably focused on the sale of ceramic goods. In that shop were found two identical terracotta busts,[19] a mould-made ceramic plaque,[20] and both sides of a stone vessel mould, as well as at least 27 commonware jugs and 11 lamps, in addition to 150 coins. These objects, particularly the moulds and the two identical busts, indicate that this shop was involved in the

[14] Baur, Rostovtzeff and Bellinger (1933) 39; Rostovtzeff and Welles (1931) 164.

[15] Baur, Rostovtzeff and Bellinger (1933) 81–145; Ruffing (2000).

[16] Most of the lamps from this shop are Baur's type V, but two are type VI, all of the same rough date. For dating of these types, see Baur (1947) 26, 44–45.

[17] Rostovtzeff and Welles (1931) 164.

[18] The original excavators did not refrain from speculation. For example, shop C7–G20 was identified as a 'temple shop' due its proximity to the temple of Atargatis: "[p]ossibly incense and tapers for the cult of the goddess whose temple lay diagonally across the corner, were sold"; Rostovtzeff (1934) 46.

[19] These busts, field nos. k387 and k326, were shown to likely be from the same mould by Downey (2003); they are her nos. 75 and 76.

[20] The plaque, field no. k398, not in the preliminary reports, was published in Downey (2003) no. 24. Another example probably from the same mould was found elsewhere in the agora, Downey's no. 23.

fabrication (though given the lack of a kiln, not solely) and selling of ceramic objects.[21]

The shops at Dura were frequently attached to houses, as at B8–H mentioned above. Of the excavated shops of Dura, 34% share party walls with houses; just over 10% of the total number of shops actually communicated with the houses in the final period of the site. In these cases, a direct relationship may be seen between the structures. In the other cases, the nature of the relationship is uncertain; it may have been that shops in the vicinity of larger houses were rented properties, but there is no evidence for this. Almost 16% of shops have an unknown relationship with houses, due to incomplete excavation of the shops themselves or of adjoining properties. While 10% of shops communicated with houses in the final period, a little over 1% had communicated with houses, but the door between them was blocked by the final period. The sealing of doors as a means of manipulating both space within and between houses is common at Dura, generally accomplished by filling the doorway with rubble and mudbrick and plastering it over with djuss. The stone or plaster lintel and jambs were generally left exposed, and frequently, the opportunity was taken to add niches to the room in the space of the sealed door.

When the shops are examined as a group, several features become apparent. Firstly, in the artefact assemblage, unsurprisingly, there is a high density of coins compared to that in the domestic and religious structures at the site.[22] Secondly, there are many architectural features apparent when these structures are examined as a group. While little is known of upper stories, there is a complete lack of staircases in

[21] Though a mould was found in this shop, certainly not all parts of the production of the ceramics could have taken place within the two rooms; the closest kilns which have been identified are in block G5/G7, Allara's kilns numbers 9 and 10, although these were thought by the excavators to have been for calcining gypsum for use in construction; Allara (1994) 132; Rostovtzeff *et al.* (1944) 105.

[22] The coins of Dura are problematic: although the contextual information was originally collected for each coin at Dura, and each coin assigned a field number, this information was not preserved. The coins were subsequently published, but without giving contextual information; Bellinger (1943); Bellinger (1949). In the YUAG archive, there are lists of coins found in each structure, but these do not retain the field numbers or stratigraphic context; the only coins with very secure contexts are the hoards and a few special finds, such as that from the siege mine. Because of this it is difficult to assess why there is such a high density of coins; certainly it is not unusual that more would have been lost where more were used, in a commercial area of the town, but it is also partially a product of both the structure of the shops (generally with earth floors in which coins could have easily become embedded) and the excavation method, which in the agora typically included the removal of these floors, in an effort to expose the Hellenistic building phases.

them, so it is likely that the plans reflect the full amount of space that they used.[23]

Other features are unique to shops, not occurring within the domestic or religious architecture at the site. These include windows just over half a metre above the floor level; most windows at Dura are above the level that would allow visibility from the interior to the exterior and vice versa, generally at least a couple of metres above floor or street level. It is then interesting to note that the exception to this is in shops such as G5–1,[24] where windows were found which had the opposite function, allowing easy visibility from the exterior of the shops (i.e. from the streets) into the buildings. Such visibility would be of obvious use to any shopkeeper wishing to keep his wares on display. Also, several shops in the region of the agora had features identified by the excavators as benches that ran along several interior walls. These 'benches', which were constructed in rubble or mudbrick and given a thin coat of plaster, are much higher and narrower than those that occur in the houses. Given that at least one of the shops with such benches can be shown to have specialised in ceramic goods,[25] including vessels, lamps, and terracottas, it seems likely that these features were in fact for the purpose of displaying goods.

There are other features in the shops which can be noted, but little can be said of them. For instance, a few of the shops were paved, either with brick or stone while the great majority had the typical floor of packed earth. Paved flooring would have made it easier to clean, to recover small objects dropped, and more attractive, but the reason for this paving is uncertain as there is no other data on these shops. The doors of the shops varied, and though all that remains of them are the jambs and thresholds a few observations may be made. Most were apparently 'single', hung doors, although some double-width doors can be seen,[26] interpreted by means of the cuttings for the

[23] The staircases at Dura typically survive very well, their lowest flight having been made either of gypsum, or more commonly plaster (either moulded solid djuss or djuss-covered rubble and mudbrick substructures); upper flights were often constructed using wooden beams, for which sockets are preserved in house-walls. The exceptions to this single-level construction in shops are those with cellars, such as those in B8. There is the possibility also of mezzanines, as at Herculaneum and Pompeii, reached via a ladder, both constructed in wood and hence archaeologically invisible at Dura, as the shops do not survive to sufficient height to preserve sockets for such features.

[24] Rostovtzeff *et al.* (1944) 123.

[25] Shop G1–114/118.

[26] For instance, shop G1–69.

turning and locking mechanisms in the sills.[27] These doorways are not unlike those in any other building at the site, with gypsum threshold, sills, and lintels, which would have been plastered. Interestingly, some shops consisting of two rooms also had doors in the interior openings between the two rooms, and sockets to hold beams with which to lock them, while other interior openings were neither trimmed with jambs nor hung with doors.[28]

In fact, the 'agora' of 3rd c. Dura, if that term is even appropriate, likely went beyond the area demarcated by the Yale expedition. The American excavators named 'sector G', or blocks G1–G8 as the market place, the 'Agora and Bazaar'. However, while the adjacent blocks remain unexcavated, some frontages were partially cleared, and it appears that the west side of block B7 was also lined by shops, indicated by the closely spaced doorways and colonnade along its front, continuing the row of shops from the west side of B8, along street H. In other blocks we are more limited by the extent of excavation but it suffices to say that we cannot be certain that the full extent of this marketplace area was indeed excavated (fig. 2).

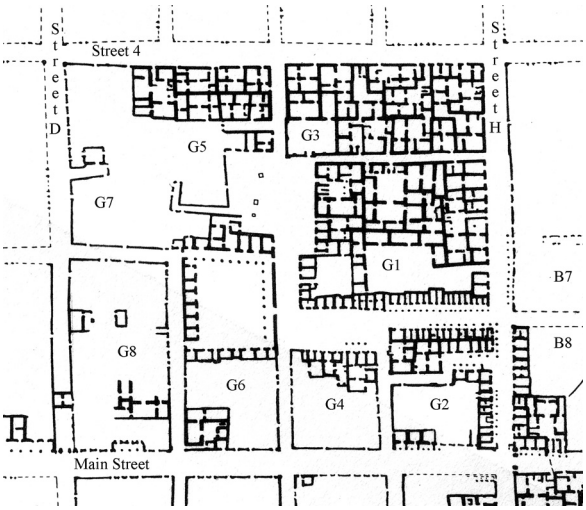

Fig. 2 Plan of Sector G and adjacent streets; north at top of plan (adapted from plan by A. H. Detweiler, Yale University Art Gallery).

[27] For instance, shops G3–1/2.

[28] For instance, G1–115/117, with a bar socket to seal the door between the two rooms, and shop G1–111, with a simple opening between the two rooms.

Unsurprisingly, the greatest density of shops is in the agora of the city, with 71% of identified shops and commercial establishments being within it. This density in the final period may not be simply due to the continuous commercial character of this sector of the city, but also the proximity of the Roman camp on its northern side (fig. 3). Outside that area (blocks G1–G8 by the Yale nomenclature), only block B2 has numerous shops clustered in a small area;[29] in that block, studied in detail by A. Allara, 16 shops were identified by H. Pearson on his plan. It appears that this block was, as named by Allara, '*l'isolato dei vasai*', where ceramics were both fabricated and sold. This was indicated not only by the number of shops but also the presence of several kilns, and the proximity of this block to the river would have also provided access to both water and clay.[30]

Eating And Drinking Places

No public drinking places were described by the Yale expedition despite the detailed volume which was published on the agora, although they did observe what they identified as several wine shops.[31] The present literature on such establishments in both the Greek and Roman periods is currently fairly limited despite their ubiquity, with Pompeii and Ostia being the primary focus of study.[32] Unlike at Pompeii, however, the food and drink establishments of Dura were excavated somewhat incidentally and never studied; as a result, they were not labelled with ancient terms, one of the problems at Pompeii and elsewhere.[33] No attempt is made here to reconcile ancient terminology with the use of the structures described, a particularly futile exercise at a site so linguistically diverse as Dura.[34] The problem is made even more acute by the traditional use of analogy in identifying such building types; while

[29] Allara (2002) 190.
[30] Clairmont (1963) 149.
[31] For example C7–A^{2}4/5; Rostovtzeff (1934) 37. These wine shops were identified on the basis of storage jars installed in the shops; what these vessels held however was not actually known to excavators. Many of these were very wide-mouthed and sunken into the floor level—perhaps making them more useful as tanning vats or other production equipment than as storage for wine or other liquid to be consumed.
[32] DeLaine (2005); Ellis (2004); Hermansen (1981) 125–83; MacMahon (2005b).
[33] Ellis (2004) 371–72. The use of inappropriate ancient terminology is however a problem in the houses at Dura; see Baird (forthcoming); Saliou (1992).
[34] Frye (1968); Frye *et al.* (1955); Kilpatrick (1964).

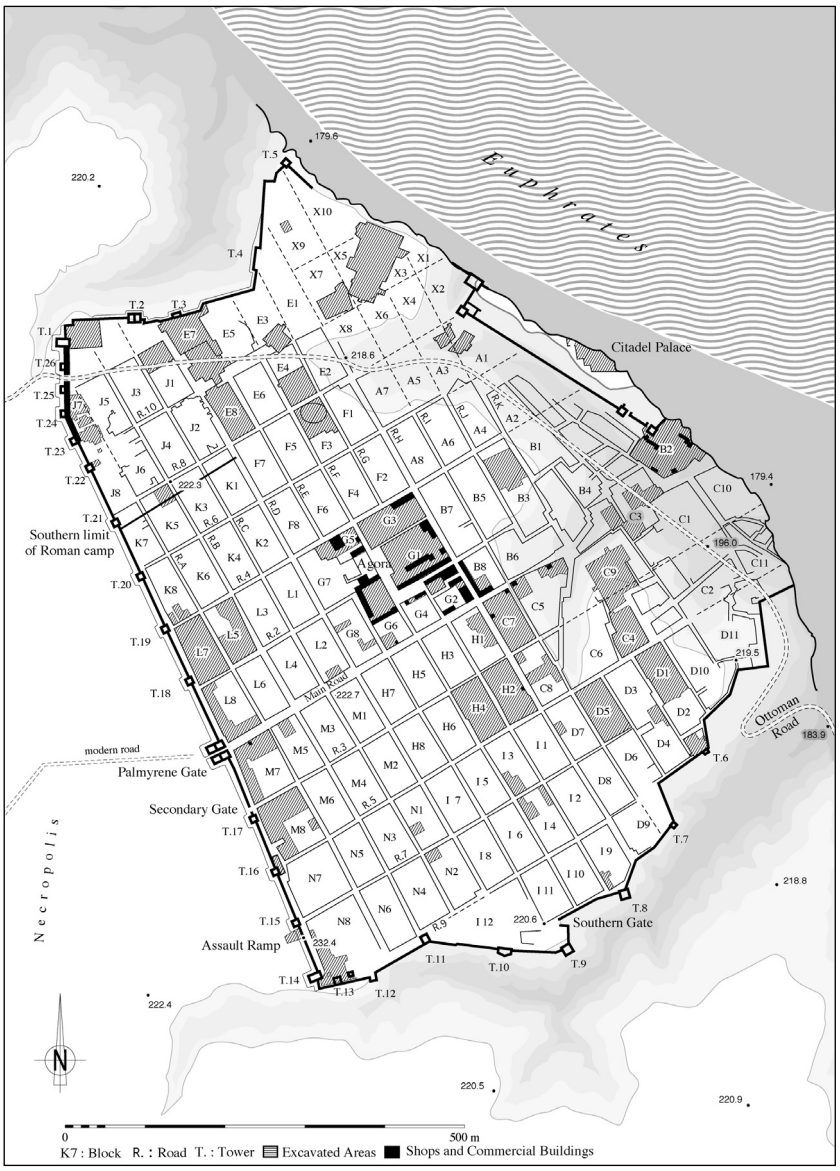

Fig. 3 Plan of Dura-Europos showing shops and commercial establishments (*Mission Franco-Syrienne de Doura-Europos*).

modern shops are quite specialised in their function it is uncertain that the same applies to ancient examples—for instance, how is it possible to determine whether a shop equipped with the means to store wine sold it for consumption on or off the premises, particularly given the problems with the ceramic assemblage at Dura? While it is possible to discuss the function of particular buildings with reference to their features and assemblages, the labelling of these with terms which have modern functional equivalents is to lend them a certainty which does not exist archaeologically. For these reasons the more general functional rubric of 'eating and drinking establishments' is used,[35] as this use can be amply demonstrated, if not necessarily shown to be the sole use, of the buildings.

There is no single defining characteristic of either food and drink establishments or shops at Dura, save perhaps the nature of the entrance directly from the street. It is interesting that the buildings which seem to have functioned as food or drink establishments do have counters or tables, but these are unlike those which occur at Pompeii and elsewhere in that they do not sit near the entrance; rather, they are within the buildings, often in a courtyard. What these establishments do share is the presence of a counter/table (a feature which does not occur in houses), at least one cooking installation, and typically more than one fire installation (for cooking or heating, it cannot be certain), as well as storage facilities of a character not seen in houses, such as amphorae or *dolia* recessed into the floor.[36] Of course there is the possibility that the locales from which food and drink was served also functioned as inns, providing overnight accommodation.[37] However, for this there is no positive evidence, and the two need not be mutually exclusive.

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[35] Even the degree to which these buildings were public or private is not certain, as it is possible that some were for closed membership, for guilds or other groups.

[36] It should be noted that lack of cooking installation does not necessarily denote that there was not one present, as portable (and hence removable) braziers are known from the site, for example, from house G5–E; see Allara and Saliou (1997) 152, n. 95.

[37] The terminology regarding inns and hotels in the ancient world is similarly problematic to that for shops, bars and taverns; the central work on such structures remains Kleberg (1957). At Dura, a structure sometimes identified as a *caravanserai* or *khan* took up an entire city block, L4, just inside the town gates; this structure was not published but a short field report survives in the Yale archives. As it was never completely excavated its label has more to do with Rostovtzeff's famed notion of caravan cities than any evidence that it functioned as such; Rostovtzeff (1932); Rostovtzeff (1938) fig. 6. Rostovtzeff also wrote that the temple of the Gaddé at Dura functioned also as a *funduq* for Palmyrene visitors; Rostovtzeff (1938) 23, 26.

Structure G6–C

On the north side of the Roman macellum in block G6 of the agora sector is structure G6–C; the location of this house is the first reason it is suspect as having a solely domestic function (fig. 4). It was first excavated in the 5th season,[38] then, under the direction of F. Brown, further investigations were undertaken in the 9th season.[39] While the structure remains visible, sadly it has degraded badly in the years since the original expedition; little more than the limits of the rooms and remains of the once impressive staircase are visible, although no cleaning has yet been attempted.

Though material from excavations in the cistern in this building yielded objects said to date as early as the mid-1st c. A.D., the structure represented on the plan shows the form of the building in the final period of the city, in the mid-3rd c. Its plan in this phase was described by Brown as having one shop with its own entrance (G6–C8), two entrances to the house, via G6–C9 off street F, and G6–C4 (said to be a storeroom)[40] off the macellum—Brown apparently saw no problem with a house being entered via a storeroom. More realistically, this is a commercial establishment maximising its position along a thoroughfare and adjacent to the macellum by maintaining entrances from each.

The structure had many features and fixtures that would indicate it was not a typical residential building, aside from the numerous entrances. The short corridor in the centre of the house (G6–C6/C3) had three terracotta tubs sunken into the floor.[41] In the court, G6–C10, which is one of the few courtyards paved in brick, there was a circular ceramic vat which was built into a 'rubblework table' which is much like a type of counter.[42] A large staircase on the western side of the court

[38] Rostovtzeff (1934) 70–71.
[39] Rostovtzeff *et al.* (1944) 153–56.
[40] Rostovtzeff *et al.* (1944) 154.
[41] Rostovtzeff *et al.* (1944) 155.
[42] At Pompeii, counters are said to be the "the defining criterion by which to identify a food and drink outlet"; Ellis (2004) 373. Similarly, at Ostia, "[t]he characteristic counter with a barrel-vaulted basin at the bottom is the surest indicator of the Ostian tavern"; Hermansen (1981) 125. On problems with using counters to identify taverns, see MacMahon (2005a) 57; MacMahon (2005b) 70. The comparability of the use of such counters at two sites so geographically and temporally disparate as Pompeii and Dura however, cannot be pressed very far, particularly when, at Dura, they occur within structures such as the one under discussion and not closer to the street. There is also the possibility of temporary fixtures or counters built of wood or other materials that are not well preserved archaeologically at Dura; the exception to this were the materi-

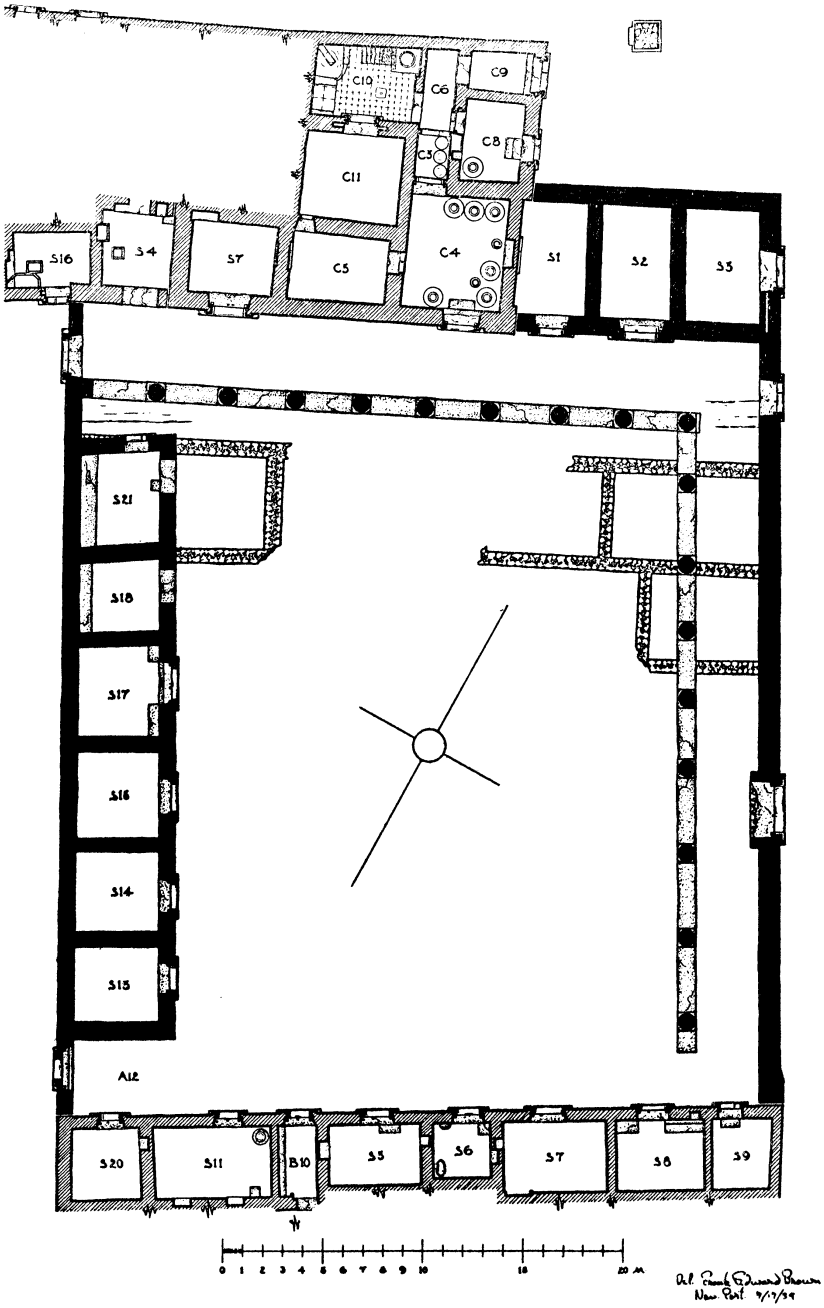

Fig. 4 State plan of block G6 by F. Brown; rooms marked C4–C11 denote structure G6–C (Yale University Art Gallery).

had beneath it a large 'double bin' for storage, and a fireplace made with bipedal bricks,[43] which could have been used for food preparation. Room G6–C11 had a plaster cornice decorated, tellingly, with a 'Bacchic mask' frieze.[44] Room G6–C4, the room with the entrance off the macellum, had 6 *dolia* standing in it,[45] two amphorae half-sunk into its earthen floor, graffiti in Greek of names of various men on the walls, and a short graffito in Latin with one Greek letter referring to an auditor or deputy of some sort.[46] Room G6–C8, again with its own entrance, also had a large *dolium*.

It would seem there are several possibilities for the use of this structure. First, it is possible that it was indeed a house, perhaps of a wine merchant, who purchased bulk from the adjoining market, stored these purchases in room G6–C4 and re-sold smaller quantities out of room G6–C8. However, the court with a counter and fireplace seem to indicate that this structure was perhaps a bar as well—there is no reason why the structure could not serve both as a shop and a sort of bar or indeed also a house in addition to any commercial function, with the domestic quarters on the upper level of the house, or simply in the same space after closing hours. There are also unusual numbers of coins from this house, over 40 in all, with 18 found in room G6–C4 alone, and 6 in G6–C11.[47]

Structure G5–C

It is also worth mentioning another building usually listed with the houses of Dura, namely structure G5–C. Texts from this house have

als within the great *glacis* along the wall street, used to shore up the city's defences in its final years, which created an anaerobic environment that preserved many organic materials. Another characteristic of the food and drink outlets was a sliding shutter as evidenced by a groove in the threshold; Hermansen (1981) 129. There is no evidence for this feature at Dura.

[43] Rostovtzeff *et al.* (1944) 155.

[44] Rostovtzeff *et al.* (1944) 156. Strangely this cornice is not mentioned in Shoe's study of the mouldings, although she did discuss Dura's plaster wall cornices generally, and similar types (satyr and Dionysiac motifs on moulded cornices); Shoe (1943–44) 18–23.

[45] On the problems of using *dolia* as indicators of drinking establishments (namely, that they are not always waterproofed, or when installed in a counter, drainable), see MacMahon (2005b) 78–85.

[46] Rostovtzeff (1934) 70–71, nos. 407–409.

[47] Other finds, though not many were recorded for this structure, included two bronze handles.

long been known and identified it as the headquarters of a group of entertainers or prostitutes; a study was made of them that formed a section of the preliminary report on the agora, although this did not contain a translation.[48] Though the house has nothing unusual about its layout, it contained a relief of Aphrodite, and more importantly, a *dipinto* specifying aspects of its use and occupants.

As it is known there were over 60 people within the organisation described in the text, it is likely that not only this house but several other houses were used for similar purposes—as the group had come (most recently, if not originally) from Zeugma, it is probably significant that a coin hoard in an adjacent house contained many coins from Zeugma (and more than the average representation of that mint at Dura).[49] It is possible that this and other adjacent houses, perhaps all the houses of blocks G5 and G7, which by the final period were contiguous, were used to house associates; it has been suggested that these entertainers could have even been owned by the army.[50]

It is noteworthy that without the text found within it, there would be virtually nothing about this structure which would imply it was anything other than a house; from this it is evident that there are likely other structures, particularly within the agora area, which have been identified as houses, but which in fact had other uses, even if these were not exclusive.[51]

Structure G2–C

The identification of this structure is far from certain, but it can be said to be something other than a house; it is unlike a typical house in that it has several entrances, all opening directly on the street (fig. 5).[52] It is also unusual for a house of this size to have multiple entrances,

[48] These texts came from fragments found throughout room 2 of G5C; Rostovtzeff *et al.* (1944) 203–65. This section of the preliminary report, by H. Immerwahr, was also submitted as Immerwahr's doctoral dissertation at Yale.

[49] Bellinger (1949) 177; Rostovtzeff *et al.* (1944) 121, 259–60; Rostovtzeff, Brown and Welles (1936) 422.

[50] Pollard (1996) 225. Supervision of the group by the army was suggested in the preliminary report; Rostovtzeff *et al.* (1944) 245, 260.

[51] It is interesting to note that this structure bears no relation to those identified elsewhere as brothels. On the criteria used for the identification of brothels at Pompeii, see McGinn (2002) 8–11; on prostitution in 2nd c. Palmyra, see *CIS* II. 3, 3913, discussed by Matthews (1984).

[52] Rostovtzeff (1934) 65–66; Rostovtzeff *et al.* (1944) 150–51.

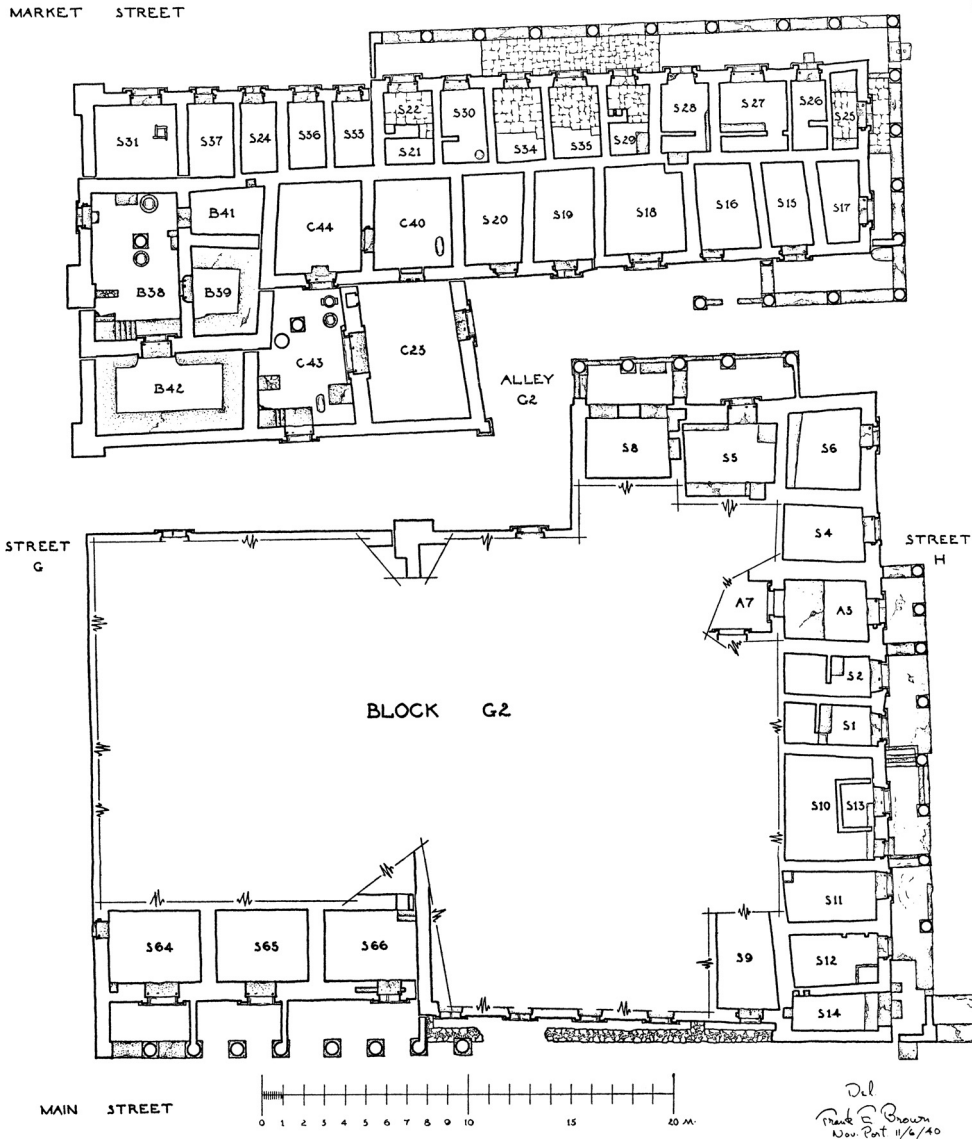

Fig. 5 State plan of block G2, including structure G2–C, by F. Brown (Yale University Art Gallery).

and also for neither to be screened from view with either an elbow-turn or a partition wall. Also, it has two rooms which were classified as 'reception rooms'.[53] There were two fire installations, both an oven and a fire-pit, unusual for a house and possibly for the production of food on a scale larger than that needed for a household; a grain mill found in the courtyard seems to substantiate this. A rubblework table, or counter, was also found in the courtyard, and this is not a feature found in any other houses.[54] Additionally, a *graffito* from this structure gives a list of names and prices, again indicating its commercial character.[55] Like structure G6–C discussed above, G2–C is also within the agora of Dura. The finds from this structure are no more conclusive than the above structure, though tantalising, with a draped statue fragment of a Venus,[56] a number of bronze armour plates[57] and other items of military dress.[58] At the very least, this 'house' should also be seen as a commercial establishment frequented by military personnel. The southerly two rooms of the 4–room structure were later additions onto what had been two shops; as such this building represents not a house in the strictest sense but rather, more likely, an expanding commercial enterprise, perhaps a food and drink establishment (fig. 6).

The reality of ancient daily life has long been skewed by modern conceptions and analogy. Indeed, it seems the problem of differentiating between domestic and commercial structures in antiquity is, in part, a false dichotomy: many people would have lived where they worked and vice versa,[59] and many of these structures had multiple purposes and hence a variety of archaeological signatures. For this reason, distinguishing

[53] These rooms were called 'diwans' by the Yale expedition; the ancient term thought to have been used for same room-type at the sites was *andron*—for discussion, see Baird (2007), Saliou (1992).

[54] Rostovtzeff *et al.* (1944) 150.

[55] A graffito scratched on the plaster, part of an account list; Rostovtzeff (1934) 66, no. 405.

[56] The current whereabouts of this statue (no. E1115) are unknown. There is a drawing of it in the YUAG catalogue, but it was never assigned a YUAG number and hence likely went to Damascus.

[57] Nos. E1138 and E1127. There is of course also the problem of the abandonment phase of the city—while the structures discussed here were all in use in the mid-3rd c. A.D., we cannot be certain, and indeed it is unlikely, that they were in use right up until the fall of the city to the Sasanians.

[58] Field no. E1137, published by James (2004) no. 85, a copper alloy belt or buckle plate; E113, described as pierced bronze by Frisch and Toll (1949) no. 35, a 'strap ornament'.

[59] Ellis (2000) 78–80. On shops at Sardis, see Crawford (1990).

Fig. 6 Remains of the colonnade along street H and the exterior of shops on the eastern side of G2 (Yale University Art Gallery: photo FIX47).

between 'houses' for purely domestic activity and those also used in commercial activities of whatever sort is a partially futile exercise.

There are a number of reasons why these food and drink establishments take a form so unlike those known, for instance, in Roman Italy. Firstly, there is the obvious geographical and temporal gap, which is the primary reason the structures at Dura cannot be identified by means of the same criteria as elsewhere. The establishments identified above, previously interpreted on the basis of architectural typology as houses, are all relatively late, 3rd c. A.D., in their form—there is no evidence for earlier food and drink establishments. It is likely that these buildings appear so much like the houses at the site because originally they were primarily domestic, and were modified to meet changing needs. The most likely group to put demands on the town in terms of food, drink, and entertainment were the Roman military, and it is possible these modified houses (G2–C, G5–C, and G6–C) were a direct result of the need created by the influx of this group, who had a massive impact on the city and many other structures in the early 3rd c.[60]

[60] On current understandings of the military camp at Dura, which supposedly took up most of the northern side of the town, see Lenoir and Licoppe (2004); James (forthcoming).

Conclusions

The excavators of the Yale-French Academy faced many challenges during their 10 seasons of work at the site. These included facing personal physical danger, and the problem of funding such a project between the World Wars.[61] Despite the many problems modern archaeologists can see with the early expeditions, and particularly with the method and standards of excavation and recording, the styles were not unusual for the time; that new information on Dura can continue to be gleaned is a testament both to the accomplishments of the excavators and also the custodians of the archive at Yale.[62]

The structures discussed here also demonstrate that there is no universal architectural criterion for the identification of commercial establishments in the Roman period, and hence no universal associated behaviour—there is variability both chronologically and geographically. For these reasons, a more holistic approach both to archaeological assemblages, structures, and interpretation must be taken in order to begin to understand the reality of ancient daily life. Dura-Europos is a well-known site, but it is hoped this contribution shows that much remains to be learned of it. While the shops, brothels, and food and drink establishments of Dura may be considered fairly mundane alongside the painted synagogue or famed Christian house-church, they formed an important component of both the urban environment and daily life.

Acknowledgements

I would like to thank Susan Matheson, the Molly and Walter Bareiss curator of Ancient Art at the Yale University Art Gallery, for access to the Dura-Europos Archives, and Pierre Leriche for allowing me to become a member of the *Mission Franco-Syrienne de Doura-Europos*. I am grateful to Simon James and Penelope Allison for their suggestions on drafts of this paper. All errors and misunderstandings are of course my own.

[61] The popular account of the excavations was published in the 1970s and this describes many of the issues that arose, although much more material on the topic can be found in the Yale archives; Hopkins (1979).

[62] The Dura archive, for instance, allows much more to be learned of these early excavations than, apparently, does Princeton's on Antioch. There, it has been pointed out that many of the published plans are in fact largely conjectural and lack of thorough recording has made their reconstruction all but impossible; Dobbins (2001) 51–52.

Appendix

Table 1 Shops and food and drink establishments of Dura-Europos, names following Yale nomenclature. First two characters denote block label (i.e. B8), and subsequent characters denote shop numbers. Where there is a letter in the second part, this denotes the Yale expedition believed the shop to be attached to a house (where the letter refers to the house designation within the block), and slashes between numbers denotes shops designated by Yale expedition as separate units but which communicated by the final period.

B8–G2	C7–F6	G1–61	G2–26
B2–10	C7–G13	G1–62	G2–27
B2–11	C7–G20	G1–63	G2–28
B2–12	D5–E18/17	G1–64	G2–29
B2–18	D5–F13	G1–65	G2–30
B2–19	G1–1	G1–66	G2–31
B2–20/22	G1–11	G1–67	G2–31
B2–25/26	G1–110/112	G1–68	G2–34
B2–27	G1–111	G1–69	G2–35
B2–28/29	G1–114/118	G1–72	G2–36
B2–3/4	G1–115/117	G1–74	G2–37
B2–30	G1–116	G1–75	G2–4
B2–5	G1–120	G1–76	G2–5
B2–6	G1–124	G1–79	G2–6
B2–7/8	G1–22	G1–80	G2–64
B2–C22	G1–41	G1–82	G2–65
B2–D5	G1–42	G1–95	G2–66
B8–G3	G1–44	G1–99	G2–8
B8–G4/5	G1–45	G1–A19	G2–9
B8–G6/7	G1–46	G2–1	G2–A3
B8–G8	G1–47	G2–10/13	G2–C
B8–H14	G1–48	G2–11	G3–1/2
B8–H15	G1–49	G2–12	G3–3/4/5
B8–H16/17	G1–50	G2–14	G3–J8
B8–H18	G1–51	G2–15	G4–45
B8–H19/20	G1–52	G2–16	G4–46
B8–H21	G1–53	G2–17	G4–47
B8–H22	G1–54	G2–18	G4–49
B8–H8	G1–55	G2–19	G4–50
B8–H9	G1–56	G2–2	G4–51
C5–4	G1–57	G2–20	G4–52
C5–A2	G1–58	G2–21/22	G4–53
C5–A3/4	G1–59	G2–23	G5–1/2
C7–A4/5	G1–6/100/126	G2–24	G5–3
C7–F5	G1–60	G2–25	G5–4/5

G5–A4	G6–15	G6–3	G6–9
G5–C	G6–16	G6–4	G6–B10
G5–E	G6–17	G6–5	G6–C
G6–1	G6–18	G6–6	G7–1
G6–11	G6–2	G6–7	H2–D13
G6–13	G6–20	G6–71	H2–H7
G6–14	G6–21	G6–8	M7–A5

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THE SHOPS OF SCYTHOPOLIS IN CONTEXT

Elias Khamis

Abstract

The shops of Scythopolis are contemporary with the initial layout of the Roman city. Similarly to other Roman cities in the East, the major streets of Scythopolis were colonnaded with rows of shops on both sides. While certain monuments and buildings in the city centre changed their character, design and function through time, the streets with their shops alongside, remained the most dominant and unchangeable feature of the city during several centuries. The owners of the shops, and their religious and cultural background, changed during the Roman, Byzantine and Early Islamic periods, but they still used the same buildings and probably sold similar products from one period to another. Sometimes it is possible to determine the function of certain shops. Among these were the shops of a coppersmith, a blacksmith, and a goldsmith, and shops for selling glass, pottery, building materials, and even souvenirs. Bakeries, taverns, and probably a butcher, can also be identified.

Introduction

This paper intends to discuss some aspects of the commercial activities that took place in the shops of Scythopolis in Late Antiquity. It should be noted that the material that is presented in this article is retrieved mainly from excavations conducted by the Hebrew University of Jerusalem at Scythopolis.[1] These excavations took place in the years 1980–81 and 1986–2003. Some of data discussed here include

[1] This part of the excavation was carried out on behalf of the Institute of Archaeology, the Hebrew University of Jerusalem, and was conducted by professors Gideon Foerster and Yoram Tsafrir, to whom I wish to express my thanks for giving me the permission to use the material for this article. I also wish to thank Benny Arubas, the surveyor and stratigrapher of the Bet Shean excavations, for his valuable notes, help and support during the writing of this article. My thanks are due to my fellow-members of the Bet Shean expedition, Sholamit Hadad and Shoshana Agady for their help. The photographs are by Gaby Laron and the illustrations by Likia Kirillov.

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Fig. 1 General view of the excavations of ancient Bet Shean, looking South.

finds that came to light from areas excavated by the team of the Israeli Antiquities Authority (fig. 1).[2]

The site, today called Bet Shean, is situated on a major crossroads leading from Egypt to Syria/Mesopotamia, and, via the Jordan valley, leading from Jerusalem to Damascus, and from the Trans-Jordan to the coastal cities of the Mediterranean. The topography of the place, its importance as a strategic point, the abundance of water sources and the fertile agricultural lands surrounding the site attracted settlers in the Early Bronze Age (and even earlier) to build a fortified city, Bet Shean, over its strategic tel.[3] Nysa-Scythopolis was founded as a Hellenistic city, in the first half of the 3rd c. B.C., probably under Ptolemy II Philadelphos.[4] It was refounded as a Roman city after the conquest of Pompey the Great in 63 B.C. By the early stages of Roman rule, Scythopolis had become the prominent city member of the *Decapolis*,

[2] The second part of the excavation was carried out on behalf of the Israel Antiquities Authorities headed by Gaby Mazor and Rachel Bar-Nathan.

[3] For the new excavations of the ancient tel of Bet Shean, see Mazar (1993); Mazar (1994).

[4] For the results of the excavations of the Hellenistic part, Tel Iztaba, see Bar-Nathan and Mazor (1994).

the league of Ten Cities. The city developed and flourished at the end of the 1st and 2nd c. A.D. at the time when the eastern Roman provinces harvested the benefits of the peaceful atmosphere of the *Pax Romana*.[5] It was during this time that the urban plan was established, which was to be the basis of the city layout for the coming centuries (fig. 2). The city was built following the urban planning concepts of the classical Roman-Hellenistic heritage of the East. Temples for Zeus, Dionysius and other gods were built in different locations in the city. In its centre a civic basilica, one or two theatres, a hippodrome (which later, in the Roman period, functioned as an amphitheatre), two large bathhouses, a monumental nymphaeum, a central monument (built on a podium at the junction of the main streets and against the Roman basilica, and adorned with statues), a *boule* and a forum were erected. Along with the monuments, straight colonnaded streets were built, flanked by shops.

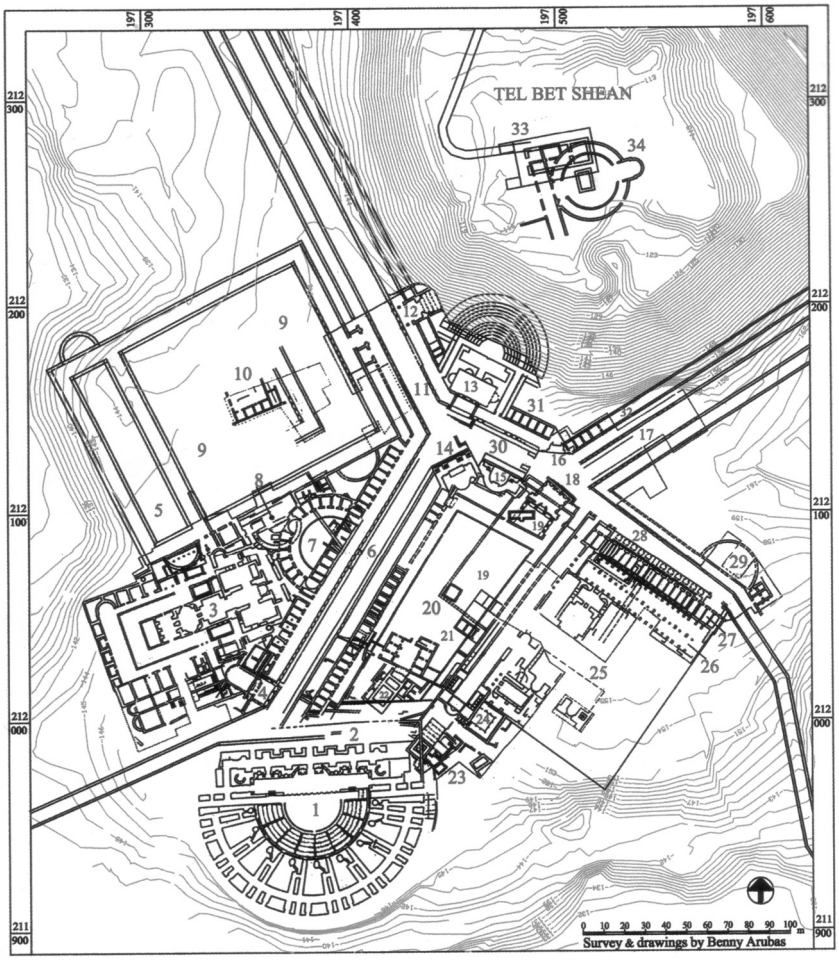
The Main Streets Of Bet Shean

The excavations traced many of the city streets, indicating the transportation network across the city.[6] The earliest street known to us, dating to the earliest stages of city planning in the 1st c. A.D., is 'Basilica Street'.[7] This street originated in the square in front of the central monument and ran along the south wall of the basilica towards the theatre. This street, which is about 130 m long and 12 m wide, had rows of shops along both its sides. During the modification of the eastern bath house in the 2nd c. the street was narrowed and covered with a long barrel vault, creating a cryptoporticus with openings to the shops. Another short street (100 m long) runs from the same square, in front of the central monument to the south-east alongside the massive wall that supported the elevated reflection pool of the monumental colonnaded façade of the eastern bathhouse. A dozen small vaulted shops or taverns were installed into this massive wall facing the street. These buildings were blocked and went out of use when the area was restructured

[5] For the history of Bet Shean in Hellenistic and Roman periods, see Avi-Yonah (1962a); Fuks (1983).

[6] For a brief survey of the monuments and urban aspects in the planning of Scythopolis, see Tsafrir and Foerster (1997) 88–99.

[7] Tsafrir and Foerster (1994a) 95, 98; Foerster and Tsafrir (1992) 5, ill. 5.



1. Theater
2. Theater Street
3. Western bathhouse
4. Propylon in Palladius Street
5. Roman basilica (?)
6. Palladius Street
7. Semicircular Byzantine plaza (Sigma)
8. Odeon
9. Reconstructed Roman forum or temenos
10. Byzantine public building
11. Northwest Street
12. Propylon and stairway to acropolis
13. Propylon and theater (?)
14. Temple with round cella
15. Nymphaeum
16. Monument of Antonius
17. Valley Street
18. Central Monument
19. Early Roman basilica with Abbasid mosque above it
20. Byzantine agora
21. Umayyad pottery workshop
22. Temple
23. Roman cult structures
24. Public latrine
25. Eastern bathhouse
26. Roman portico, later Silvanus Hall
27. Roman decorative pool with Umayyad shops above it
28. Silvanus Street
29. Semicircular plaza (Sigma?)
30. Street of the Monuments
31. Shops of the Street of the Monuments
32. Abbasid quarter above Valley Street
33. Temple of Zeus Akraios
34. Round church

Fig. 2 Map of the central excavated area of Scythopolis/Bet Shean.

during the 6th c. During this stage of modifications the reflection pool was replaced by a basilical building hall, built by a certain Silvanus (according to the foundation inscription found *in situ*), and a new street on a higher level was paved with basalt stones pulled up from the earlier Roman street. On the other side of the street new shops, including a '*sigma*-shaped' row of shops, were erected. This street turned towards the south and was connected to the newly developed suburbs and streets of shops around the amphitheatre. A prominent and fully uncovered street in the city centre is 'Palladius Street'. This street, *ca.* 150 m long, stretches between the large theatre and the small theatre at the foot of the acropolis (ancient tel) and ends at the temple's plaza. The street was first erected in the 2nd c. and refurbished during the 4th c. (after the damage of the earthquake in A.D. 363), by the *archon* Palladius. At the beginning of the 6th c. it was reshaped once more together with the Byzantine agora, while a new semicircular shopping centre was installed in its midst. The new commercial building was called *sigma* by its builders.

The distance from the north-west gate of the city to the north-east gate, through the main route of the colonnaded streets across the city is approximately 1,400 m. Many segments of the main colonnaded streets that lead from the city's centre to its 6 gates were unearthed. Among these are some segments of 'Valley Street' which stretches over 560 m from the north-east gate to the plaza in front of the central monument; the whole length of the 'Monuments Street'; large portions, *ca.* 100 m, of 'Silvanus Street'; and segments of the long north-west street which stretches from the north-west gate to the plaza junction in front of the temple. More street segments were uncovered elsewhere in the city, for example, 'Orestes Street' alongside the amphitheatre.[8]

These main streets were wide, and lined with colonnaded and roofed porticos (fig. 3). They were paved with basalt blocks of an average width of 8 m, and were flanked by uncovered sidewalks, approximately 2 m wide. Two parallel rows of shops opened onto these sidewalks. The porticos, roofed with tiles, rested on columns located on the sides of the streets and on the walls of the shops. The average width of the colonnades was about 6 m, which together with the paved street and sidewalks, gives an average width for the whole unit of the street of

[8] Foerster and Tsafrir (1988) 27–29; Tsafrir and Foerster (1997) 93–95, figs. 19–20.

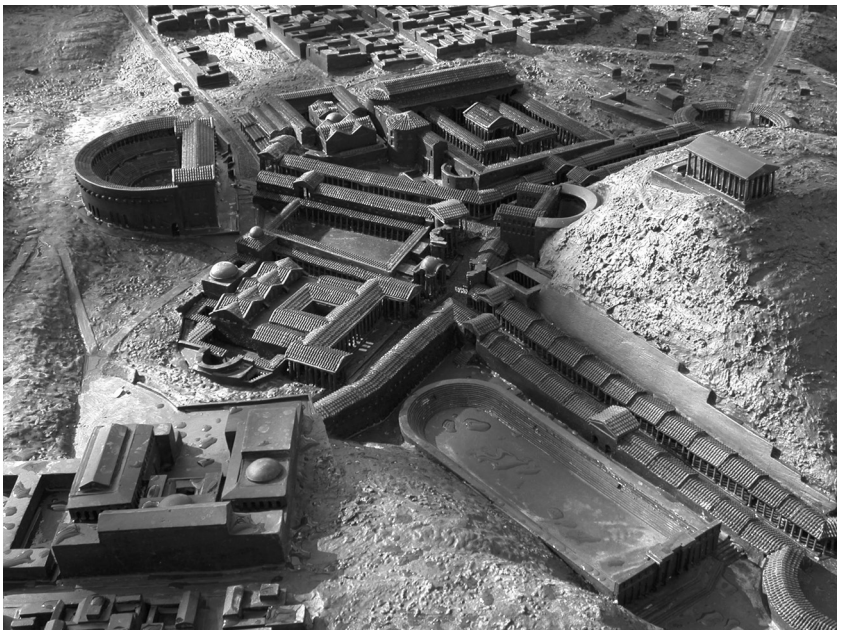


Fig. 3 Cast bronze model of the centre of classical Bet Shean, looking East.

about 24 m.[9] The average width of each shop (3.50 m) produces an approximate ratio of 28 shops per 100 m along the street length on one side. The streets, however, especially those in the city centre, were adorned by monuments and monumental gates, and therefore the shops did not form continuous rows. A ratio of about 14 shops per 100 m is thus more realistic.

Many of these Roman shops, located along the streets of Scythopolis, were still in use during the Byzantine and Umayyad periods, though with certain modifications. The state of preservation of the street complexes, as revealed by the excavations, indicates that from the end of the Byzantine period onwards and in particular after the Muslim conquest in A.D. 640, there was a process of transformation in which the municipal authorities no longer ensured high standards of maintenance of the public areas. As a consequence of this process, the width of the original Roman streets was considerably reduced. The original porticos ceased to exist and were used to accommodate additional

[9] Tsafrir and Foerster (1997) 91–92.

shops, while the street itself turned into a narrow lane as a result of the encroachment of shopkeepers who set up their stalls on both sides. By the end of this period the town was no longer known as Scythopolis but as Baysān, following the ancient Semitic name of Bet Shean.[10]

The Shops

There is some evidence that many of the inhabitants of Bet Shean were of Semitic origin. During the Hellenistic and the Roman periods most of them were pagans, probably mixed with minorities such as Jews and Samaritans. The Roman shops were apparently used and owned by these communities. During the Byzantine period Christians became the major community in the city and they probably owned many of the shops there. It is possible that some of the owners were still pagans at that time, but not after the end of the 4th c.[11] Although two synagogues were excavated in Bet Shean, one Jewish[12] and one Samaritan,[13] there is no evidence that Jews or Samaritans owned any of the shops, but Jewish sources make it very plausible that they did some of their shopping there during the Classical and imperial periods.[14] The only clear piece of evidence of Jewish or Samaritan community involvement in the commercial activities in the city is a unique incised Byzantine bronze weight bearing the Aramaic word *peleg*, which means 'half'; its weight, 13.20 gm, matches half a Roman ounce. The weight, however, was not found in a shop.[15] There is one other possible hint of the use of Jewish weights in the Byzantine period but this will be discussed later. It is probable that in the Umayyad period some of the new owners of the shops were Muslims, even though most of the shops were probably still occupied by their original Christian owners. The Muslims captured Scythopolis after a battle,[16] which meant, according to

[10] For the changes that took place in the urban planning of Scythopolis during late antique and Early Islamic times, see Tsafrir and Foerster (1994b); Tsafrir and Foerster (1997) 106–46.

[11] Tsafrir and Foerster (1997) 90–91, 102–108.

[12] Bahat (1981) 82–85.

[13] Zori (1967) 149–67.

[14] For Jewish and Samaritan communities in classical and Byzantine Bet Shean, see Tsafrir and Foerster (1997) 87, 99–106; Avi-Yonah (1962b); De Segni (1988).

[15] This weight will be published soon by the author, together with the other measures and weights from Bet Shean.

[16] Al-Ṭabarī (1964) 2145–46, 2159; Tsafrir and Foerster (1997) 144.

the famous Damascus articles of surrender, that the original inhabitants had to transfer half of their properties, including houses and probably shops, to the victorious Muslims.[17]

The long and continuous use of the Roman period shops until Byzantine and Umayyad times resulted in few finds that supply evidence of their original use in the early phases of occupation. Most of the shops were probably used for selling different kinds of commodities. It is very difficult to identify, at this stage of the research, exactly what service each shop performed, except in cases where there is written evidence or an exceptional find that provides evidence of the shop's function. From the finds in the shops, together with what we can learn from the written sources about the products that were produced in Bet Shean and its vicinity, it is possible to reconstruct, along general lines, the contents of the shops and the way goods were displayed and sold. Bet Shean was famous during the Classical period for its dates, wheat, olive oil, and wine. The Aramaic mosaic inscription from the 7th c. synagogue found in Tell Rehov, located some 5 km south of Scythopolis, mentions 22 different kinds of fruits and vegetables that were sold in the shops of Bet Shean.[18] Furthermore, from the finds at the site, it can be deduced that pottery, glass and other materials were produced in the city in large quantities and sold in its shops.[19] The *tabuns*, or oven installations, point to the fact that some other shops were used as workshops, as bakeries, and for preparing food. Other shops probably served as eating places or taverns. Food was most likely served on pottery plates, and liquids in glass vessels; these were laid on wooden or stone tables. Wine and olive oil, among the most important products of Palestine, were stored in amphorae and jars of different shapes and types. These types of vessels were found in large quantities in the shops

[17] This assumption is based on the division of the market in Jerusalem by 'Umar between the natives and the Muslims, see Elad (1982) 31–32.

[18] For the mosaic inscription, see Sussmann (1973–74); Sussmann (1981).

[19] Kilns for producing pottery and pottery storage rooms were found in different areas in the Bet Shean excavation. See, for instance, Bar-Nathan and Mazor (1992) 32–34, ills. 51, 53–54 for pottery kilns and industrial installations from the Umayyad period, located next to the theatre; Mazor and Bar-Nathan (1996) 19, ill. 20 for a pottery storage room; Tsafrir and Foerster (1994a) 115 and Tsafrir and Foerster (1997) ill. 51 for Umayyad pottery kilns inside the main entrance to the arena of the amphitheatre; Tsafrir and Foerster (1997) ill. 52 for a Umayyad pottery kiln installed in a Byzantine shop, south of Palladius Street. A unique glass-smith workshop including storage rooms and shops was also found near one of the city gates, see below. Other industrial structures of uncertain function were found elsewhere in the city and were used to produce different materials.

above their floor levels. Some of them were also found buried up to their shoulders underneath the floor. More valuable liquids such as mercury, perfumes, special oils and ointments were stored in small glass bottles and pottery flasks which are present among the finds. Cotton, linen and wool textiles were probably displayed on wooden shelves or kept in large boxes. Traces of burnt wood, as well as hinges, padlocks, and bronze plates from caskets and boxes, were found in several shops, but no traces of textiles were left. Glass vessels, small pottery vessels and oil lamps were also laid on shelves and cabinets inside the shops. Iron implements, such as pruning hooks, sickles and shears, were hung on the wall by means of nails and hooks. Other objects, such as lamps and weighing equipment, were probably hung from the ceiling. Straw products, such as baskets and palm leaf containers, were laid on the floor outside the shops. Spices, vegetables, and meat were probably displayed both inside and outside the shops. Vegetables were most likely piled over steep wooden shelves, as they are still displayed in most Middle Eastern countries today. Cereals, lentils, beans, chickpeas and similar products were probably displayed in open pottery vessels inside the shop. In addition to animal bones from goats, sheep, chicken and other animals, seeds of olives, dates and some cereals, as well as other carbonised materials, were gathered from the shops and other areas of the excavation.

'Palladius Street' And The *Sigma*

We can learn about the content of some of the Roman shops from a row of 25 shops along the lower level of 'Palladius Street'. These shops were damaged in the earthquake of A.D. 363 and rebuilt for use when the area was remodelled as a Byzantine agora. Nine of these shops had fallen out of use and were intentionally sealed to support the upper level of the shops. These shops revealed, along the walls, ledges with sunken stone basins and jars, similar to the furnishings of the shops that were exposed at Pompeii and Herculaneum. These installations indicated that different kinds of commodities were kept in them for sale. A small that shop.[20] Another shop in the same complex, which was rebuilt, and functioned beside the Byzantine agora from the end of

[20] Mazor and Bar-Nathan (1994) 130–32; Mazor and Bar-Nathan (1996) 15, ills. 14–15.

the 4th c. to the beginning of the 5th c., was found full of hundreds of bricks, exhibited in rows for sale. In this shop there was also a mosaic floor depicting a cross and a monogram of Christ, with the inscription: for the 'lovers of building'.[21] 'Palladius Street' was rebuilt at the beginning of the 5th c. and the shops, along with their sidewalks, were paved with mosaics that were later replaced with marble slabs. These shops included various industrial installations, pools and platforms and probably functioned as workshops. In other shops sunken jars and *tabon*s (oven installations) were found. More than a century later, in A.D. 507, the new semicircular façade of the *sigma* was built (fig. 4) and it included 12 shops or offices;[22] in fact, as can be learnt from the erotic inscriptions inviting people to enter, some of them served as places for prostitution. The shops were paved with colourful mosaics, the most beautiful among them depicting Tyche, the goddess of the city.[23] A staircase in one

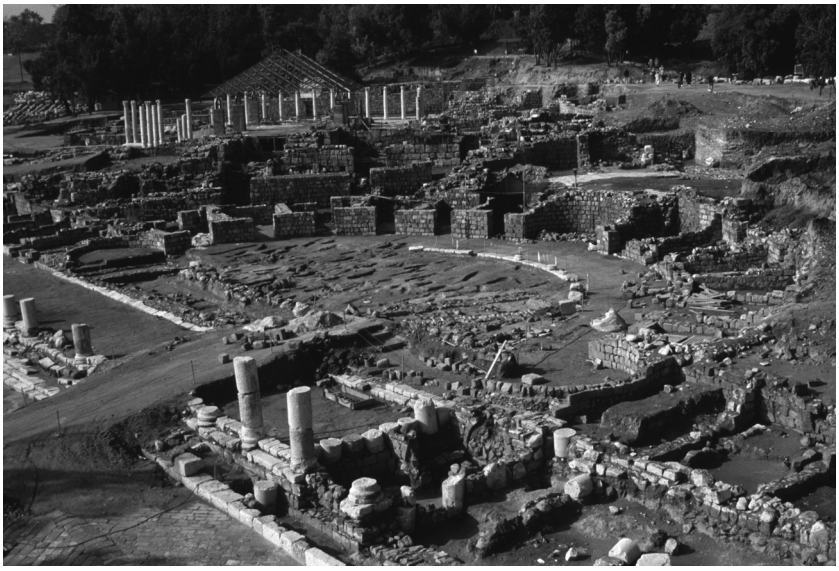


Fig. 4 The *Sigma* and part of 'Palladius Street'.

[21] Mazor and Bar-Nathan (1994) 133; Mazor and Bar-Nathan (1996) 9, ill. 17.

[22] According to the Greek monumental inscription that was found in the exedra, the *Sigma* was built at the year A.D. 507, in the days of the αρχων Theosebius son of Theosibius under the care of the πρωτος Silvanus, son of Msrinus. See Tsafrir and Foerster (1997) 121–22; Mazor and Bar-Nathan (1996) 14.

[23] Mazor (1988) ill. 8; Tsafrir and Foerster (1997) ill. 12.

of the shops suggests the existence of a second floor. Some of these shops were connected to a rear room that was approached through a small door. Niches with horizontal grooves, used for holding wooden shelves, were found in some of the shops. The shops in 'Palladius Street' were blocked up at the end of the 6th c. and were not used in the Early Islamic period.[24]

The Byzantine Shops Opposite The Nymphaeum

The most important evidence attesting to the contents of the Byzantine shops comes from the row of 6 shops built in 'Monuments Street', opposite the nymphaeum (fig. 5).[25] The shops, which originated in the Roman period, continued to function as such until they were destroyed by fire, probably in A.D. 540 (based on three coins of Justinian I, minted in Carthage in A.D. 539–43, and found under the fire debris). The façade of the shops can be reconstructed to a height of *ca.* 8 m, thus

Fig. 5 The Byzantine shops opposite the nymphaeum of 'Monuments Street'.

[24] Bar-Nathan and Mazor (1992) 38–40, ills. 60–61; Mazor and Bar-Nathan (1994) 130–31; Tsafrir and Foerster (1997) ills. 23, 28–29.

[25] Agady *et al.* (2002); Bijovsky (2002); Goren (2002).

leaving room for an upper floor within the shop, reached by a wooden ladder. Originally, each shop had an opening in the rear wall, which was blocked later on. This indicates that some activities took place at the back. The floors were made of hard-beaten earth. At the back of some of the shops were flat installations made of bricks, probably benches. On the floor a thick layer (*ca.* 0.50 m) of ashes was found, comprising burnt beams, iron nails, iron hooks, and bricks. These remains, probably from the roof structure and the upper floor or shelves, fell inside the shop. In the burnt layer a large quantity of coins, pottery vessels, fragments of glass and other objects was found.

The pottery vessels found in the shops mostly include storage jars and cooking pots, but also bowls, basins and one complete amphora. There are two bowls of African Red Slip Ware, which are stamped.[26] The first one depicts the figure of a standing saint with his right hand raised in a gesture of blessing, and holding a long cross in his left hand. The second one is decorated with two stamped palm trees bearing bunches of fruits. Other Red Slip Ware plates are stamped with crosses and classified as Phocaean,[27] while the Cypriot Red Ware plates found in the shops are unstamped. One reddish cooking jug, storage jars, and two light reddish brown clay anthropomorphic jugs are painted with white lines (fig. 6).[28] In the shops 23 complete lamps and a large

Fig. 6 Anthropomorphic jug found in the Byzantine shops opposite the nymphaeum.

[26] Agady *et al.* (2002) fig. 14:1–2, pl. 1.
[27] For this type of African Red-Slip ware, see Hayes (1972) 160–66, 266.
[28] Agady *et al.* (2002) fig. 17:4–5, pl. 2:1–4. Parallels to this type of anthropomorphic jugs were found in Jerash, see de Montlivault (1986) 72, fig. 20:1.

number of lamp fragments were found.[29] The lamps start in the Early Roman period, continuing throughout the Byzantine era. The glass vessels discovered in these shops represent almost all the characteristic vessels of the Byzantine period; they include bowls, beakers, bottles, jugs, lamps, a bracelet fragment and one bead. Almost all of them are made from bluish-green and green glass.[30]

Among the finds in these shops were four *eulogia* tokens and two *ampullae* found together in one shop. Two of the *eulogia* tokens depict scenes from the life of Jesus: the adoration of the Magi, and the baptism of Christ. The third shows an object and has a Greek inscription bearing the name of Solomon. The object is identified as a root, perhaps of the mandragora plant, by which Solomon gained his powers, controlling the demons.[31] The fourth token is a fragment of a *eulogia* with an angel.[32] Among the finds in another shop (where the two anthropomorphic jugs were found) were a marble bowl ornamented with crosses, an iron sword, and a large quantity of olive seeds.[33] In a third shop a small marble bowl, a figurine, and a bowl imprinted with the figure of a saint or of Jesus were found. In the centre of the shop was a marble panel, probably part of a table. In addition to these items, a small black steatite amulet, set in a silver frame, was also found in this shop.[34] This magical amulet belongs to what is known as the Graeco-Egyptian type. On the obverse of the amulet is a schematic snake-legged figure.[35] On the reverse of the amulet, there is a Greek inscription ΠΕΠΤΕ 'to digest' thus clarifying the amulet's function: to protect its wearer against stomach diseases. In a fourth shop, three glass weights of unique type were found.[36] These weights are much larger

[29] Agady *et al.* (2002) 464–76, figs. 19–20, pls. 5–6.
[30] Agady *et al.* (2002) 483–92, figs. 22–24.
[31] Joseph, *AJ* 8:46–48; Joseph, *BJ* 7:180–85.
[32] Agady *et al.* (2002) 477–83, fig. 21; Goren (2002). The dating of these *eulogia* tokens, on stratigraphical grounds, before *ca.* A.D. 540 is very important. It shows that these objects, usually dated to the 6th-7th c., were already in use as early as the first part of the 6th c. and probably even during the late 5th c. For two more *eulogia* tokens found in Bet Shean, see Rahmani (1993). For the Solomon Eulogia type tokens, see Rahmani (1999).
[33] Agady *et al.* (2002) fig. 26.
[34] Agady *et al.* (2002) fig. 26:5, pl. 10:1–2.
[35] For this type of amulet, see Bonner (1950) 123–39, pls. VIII:162–76, IX:178–85; Goodenough (1953) II 245–58, III nos. 1078–115; *Antike Gemmen* (1970) pls. 23:186–87, 100:127–29, 101:130–36, 102:137; *Antike Gemmen* (1972) pls. 279:2907, 280:2908–10, 281:2911–12.
[36] Agady *et al.* (2002) 492–98, figs. 25–26, pls. 9–11.

than the other glass weights known to us from the Byzantine period.[37] On the first weight appear the two Greek letters in relief Γ°H meaning 8 ounces. Two pieces belonging to two other glass weights were found in the same shop. One carries the sign of the *libra* ↑; the part supposed to carry the letter that would show the number of *librae* is broken, so we can only suggest, based on its size and weight, that it was originally a one *libra* glass weight unit. The third weight, also only partially preserved, carries an unclear sign similar to the Greek letter 'S' *digamma*, which matches the number 6. Several additional glass weights, similar to these three weights, were also found at Bet Shean. I am not aware of weights comparable to any in this series; it may possibly be assumed that this type is local.

Glass weights were accepted among the Jews, and it is probable that they were accepted among the Samaritans as well since the weight values of these glass weights were precise and not easy to forge. By contrast, chipping or dipping in a salt or acid solution were well-known fraudulent practices used to reduce the weight of metal examples. According to the Jewish Hallacha law of the Talmud: 'Weights may be made, neither of tin nor of lead, nor of an alloy, nor of other types of metals. But one should make them of glass'.[38] It is for exactly the same reasons that Muslims preferred glass weights to metal ones as their official weights and it is possible that some of the weights found in the shop continued to be used by the Muslim inhabitants of Bet Shean after they conquered the city. There are several pieces of evidence suggesting that these unique types of weight found at Bet Shean could have been used by the Jewish or the Samaritan communities, notwithstanding the Christian character of some of the finds in the shop where they were found. There is a lack of crosses, signs and figures on the weights; similar weights have not been found outside Palestine;[39] and finally it must be

[37] The common type of Byzantine glass weight is round and relatively small, and was used as a coin weight mostly for the *solidus* and smaller values. These coin weights were usually stamped with crosses, monograms of Greek letters, figures or different signs and symbols. Most scholars believe that these weights were issued in the 6th c., and were apparently used until the beginning of the early Islamic period, becoming widespread throughout most countries around the Mediterranean, see Vikan and Nesbitt (1980) 36–37; Entwistle (1994) 15.

[38] For weights which are permitted or prohibited to be used by the Jews according to the Jewish Halachic (religious) law, see the eighth Baraitha, which discusses specifications for weights (*b. B. Bat.* 89b).

[39] In the Rockefeller Museum in Jerusalem there is a unique commercial Byzantine glass weight. It is a large rectangular weight, flat on one side with a ring handle on

taken into account that the written sources document the involvement of the Jews and the Samaritans in the daily life of Bet Shean during the Byzantine period.[40]

These shops are located in one of the most attractive places in Scythopolis; the finds, though rich, do not indicate the kind of commerce practised in them. The bench, the marble bowls used as mortars, the cooking pots, the plates, the jugs, the glass bowls, the beakers and the bottles, together with other finds such as olive seeds, could suggest that they were places where food was produced and served. The *eulogia* tokens and the *ampullae* found in one of the shops indicate the possibility that the shop served pilgrims who visited Scythopolis. It is plausible that the shops catered for pilgrims who climbed to the Round Church on the acropolis, which excavators tend to identify with the pilgrims' church of St. Basilius, known to us from Early Byzantine sources.[41] The people who passed the shops on their way to the church on the acropolis would have probably stopped off to get food and drink, and to buy some souvenirs.

The Byzantine Bazaar (Or 7th C. Bazaar)

Towards the end of the Byzantine period, at the beginning of the 6th c., a bazaar, including 20 shops in 4 rows two lanes across, was built inside the city walls at the entrance to the north-east gate. The traces of staircases leading from the lanes to the second floor indicate that the shops were built in two storeys, and they were rich in finds. The bazaar was built at the beginning of the 6th c. Next to the bazaar a row of shops was excavated, among which, three appear to have been used as glass workshops, and the fourth for selling their products, as is evident from the large quantity of vessels found there. The vessels include lamps, wine goblets, bottles, juglets, plates, and round and square window glasses. The glass vessels were exhibited on shelves, and in cabinets and baskets, inside the shop. In the glass workshops a large quantity of waste, raw materials, and glass production installations, such

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the other. On the flat side the Greek signs ↑B are stamped in large thin relief. This weight is not published, but the museum guide states that its weight is 665 gm. The fact, however, that the signs indicate two *libras* (665 gm) was not recognised.

[40] See above n.15.

[41] Agady *et al.* (2002) 441–42.

as the kiln, were found. These shops existed only for a short time; most of them ceased to function after the Persian invasion of A.D. 614 and they were not in use after the Muslim invasion.[42]

Shops In 'Valley Street'

We have mentioned earlier that parts of both 'Valley Street' and 'Northern Street', with their shops, have been excavated (fig. 7).[43] Both streets shared similar activities, judging from the reshaping of their architectural appearance during the Roman period and Late Antiquity. Almost all of these shops were originally built in the Roman period and continued to be used in Byzantine times but since they were last occupied by the Umayyads, most of their finds belong to this period. As mentioned above, it is at this stage that the streets turned into nar row lanes as a result of the encroachment of peddlers who set up their

Fig. 7 'Valley Street'.

[42] For the Bazaar and the unique glass workshop, see Mazor and Bar-Nathan (1994) 133–34; Mazor and Bar-Nathan (1996) 26–27, ills. 31–33. The glass finds from the workshop are unpublished.

[43] Foerster and Tsafrir (1992) 18–21; Tsafrir and Foerster (1994a) 96–97.

stalls on both sides of the streets. At the end of the Umayyad period a strong earthquake devastated this city and many others on both sides of the Jordan Valley and turned them into ruins. The earthquake caused major destruction to all the buildings and monuments in the city. The sudden destruction of the city is attested not only by the ruins and the rubble but also by the fact that many valuable goods, articles, and coins were left behind in the shops and houses. Some of the owners did try to save their valuable belongings but were trapped under the rubble, their gold coins and other items scattered around their bodies, as we can learn from a few skeletons found under the destruction deposit of the earthquake.

We have chosen to illustrate here the contents of the first two shops on 'Valley Street'. The first one is located at the corner of the junction leading to 'Silvanus Street', in the plaza with the central monument.[44] In this shop, under the rubble of the earthquake, a pile of yellowish water flasks was found (fig. 8).[45] These flasks were made in one of the excavated kilns of the city, as shown by the waste material found in the

Fig. 8 A pile of yellowish Bet-Shean-type water flasks, as they were found in a shop in the junction opposite the central monument.

[44] For the location of these shops, see Tsafrir and Foerster (1997) figs. 4–6.
[45] Tsafrir and Foerster (1994a) 111.

surrounding area.[46] The climate in Bet Shean is mostly hot throughout the year, and drinking water during the hot days is a basic need. The location of such a shop in one of the main junctions leading in and out of the city is therefore very logical. The second shop is located on the opposite side of the same junction, behind the Antonius monument. In this shop a bronze hoard, containing different broken and damaged objects, was found (fig. 9).[47] Among them were parts of a life-size Roman bronze statue of a naked male, a crenulated brazier[48] and bronze remains of huge doors, probably belonging to the main public basilica. These remains included a huge and heavy pair of hinges, lower and upper sockets, and large heads belonging to decorative nails. These objects were probably gathered in this shop in order to be either melted down or traded. The metallurgical study of a number of bronze items from Scythopolis created in the Early Islamic period shows that according to their chemical composition they were made from melted down bronzes.[49]

Fig. 9 Part of the bronze hoard in the shop behind the Antonius Monument.

[46] Mazor and Bar-Nathan (1996) fig. 20; Tsafrir and Foerster (1997) fig. 53.
[47] Foerster and Tsafrir (1992) 20, ill. 36.
[48] For similar type of crenulated brazier, see Lacabe (2002) 155–21.
[49] For the results of copper alloy analyses from Bet Shean, see Ponting (1999) 1311–21.

On the sidewalk, near the shop with the bronze hoard, an interesting bronze weight of the discus type was found (fig. 10). This bronze weight was broken and had apparently been sent for recycling to this shop. It is a typical Byzantine bronze weight that was modified and recycled as a Muslim weight.[50] Around its margin, between two raised circles, is an inscription in delicate Arabic Kufic script, containing the traditional Islamic formula of the *Basmalah* and *al-Shahāda*—the testimony—which is partly missing. Within the inner circle appears a partly preserved inscription in a similar script which runs in three horizontal lines and refers to the order for the manufacturing of this weight: 'given in the name of the Amīr Saʿīd b. ʿAbd al-Malik, carried out by…[broken]'. This is the name of the Amīr Saʿīd, son of the caliph ʿAbd al-Malik b. Marwān who was the governor of *Jund Filastīn* (the Byzantine *Palaestina Prima*) from February A.D. 743 to April A.D. 744, when this weight was issued.[51] Dating this weight towards the end of the Umayyad period may attest to the fact that bronze weights of the Byzantine type, at least in Palestine and perhaps also in Syria, continued to be used until the end of the Umayyad period.

Fig. 10 A Byzantine type bronze weight incised with an Arabic inscription bearing the name of Saʿīd b. ʿAbd al-Malik.

[50] Khamis (2002) 143–54.

[51] For Saʿīd b. ʿAbd al-Malik as Governor of *Jund Filasṭīn*, see al-Ṭabarī (1964) 1831; Ibn al-Athīr (1965) 294; Ibn ʿAsākir (1989) 308.

Shops In 'Northern Street'

Two of the shops of 'Northern Street' contained some important finds that reveal new aspects of the commercial activities in Bet Shean in the early stage of the Islamic period (fig. 11). In one of the shops, on the eastern side of the street, at the footsteps of the tel, a steelyard, with a counterweight in the form of a bust of an empress, was found under the earthquake rubble (fig. 12).[52] The steelyard is incised in Arabic and Greek at each of the two adjacent sides on the long arm. It could be used to weigh more than hundred *ratls* or *litrae*.[53] The counterweight depicts an empress wearing a cloak, which she holds in front of herself with the right hand. She has a tunic beneath the cloak, and her left hand holds a scroll against its rope. Her hair is in an elaborate, high coiffure with a diadem of large stones, and she wears large earrings and a heavy necklace. The counterweight was filled with lead from the bottom, and a ring for suspension is cast on top of the head. Among several possible imperial candidates in the 5th c., Aelia Eudocia, wife

Fig. 11 'Northern Street'.

[52] For the location of these shops, see Tsafrir and Foerster (1997) fig. 9.

[53] For the way in which the ancient steelyards functioned, see Damerow *et al.* (2002) 93–108; Khamis (2001a) 55–59; Hill (1952) 51–55; Petrei (1926) 29–33.

Fig. 12 Steelyard with a counterpoise weight depicting a bust of an empress found in one of the shops in 'Northern Street'.

of Theodosius II (A.D. 408–50), best suits this half-figure bust.[54] The type of these weights continued and was repeated by successive casting throughout the Byzantine period, and as is evident from this example they continued to be used until the end of the Umayyad period, probably by Christian merchants.

Opposite the first shop in 'Northern Street', on the west side of the street, a group of more than a dozen intact and fragmentary glass weights were found. All these weights bear Arabic inscriptions in Kufic script. These weights are extremely rare[55] and represent evidence of the Umayyad caliph 'Abd al-Malik's A.D. 696 reforms of weights and measures (fig. 13).[56] A few of the weights preserved their original shape;

[54] For similar counterpoises of Aelia Eudocia, see Comstock and Vermeule (1971) no. 644 (5th c.); Ross (1962) nos. 71–72 (5th c.); Delbrueck (1933) 229–31, pls. 122–23; Boucher (1983) 131, fig. 204 (first part of the 5th c.). For a special study of these counterpoises, see Franken (1994) type CA, esp. nos. 1, 7, 25, 45–46 (possibly busts of Aelia Eudocia).

[55] There are only two glass commercial weights similar to those known to us bearing the name of the Umayyad caliph 'Abd al-Malik. These weights were found in Bet al-Rās/Capitolios in the Trans Jordan, see 'Abd el-Qader (1935) 139–42. For a small coin glass weight bearing the name of 'Abd al-Malik, see Launois (1959) no. 1.

[56] Grierson (1960) 241–64.

Fig. 13 Abd al-Malik's glass weight.

at least two or three of these were almost intact, with only small fragments missing. Two types of weights were found, each type including large and small weights. The larger weights weighed one *ratl* and the smaller ones half a *ratl*. The weights of the first type were minted with the same die in Arabic Kufic script in 7 lines. These are the earliest Islamic glass weights known bearing Arabic inscriptions.[57] They were issued in the time of 'Abd al-Malik and under his instruction. It is unlikely that they were issued before his famous reform of A.D. 696. 'Abd al-Malik's order was carried out by al-Walīd who most probably was al-Walīd b.'Abd al-Malik, the future caliph. A precise dating for

[57] For the early Islamic glass weights from Egypt and elsewhere, see Petrei (1926); Balog (1976); Morton (1985).

this type of weight is difficult to establish, but the year A.H. 85/A.D. 704–705, based on al-Walid's nomination as the crown prince, which he remained until the death of his father 'Abd al-Malik in the same year, is reasonable. In any case, it is certain that the weight was issued between A.D. 696, the year of the reform, and A.D. 705 when al-Walīd became caliph.

It is known that al-Walīd also followed in his father's footsteps by enacting a series of reforms. Amongst other things, he ordered the issuing of glass weights similar to those he had released in the past by order of his father. The second type of weight found in the same shop bears the name of the caliph al-Walīd. Each example was stamped with the same die that includes 8 lines in Arabic Kufic script. This type of weight is unique and has no parallels. It is of a type similar to 'Abd al-Malik's glass weights in size, colour and style of script, though the script is of greater density. The inscription starts with *Basmalah*, a typical formula that appears in this type of Umayyad weights but contains the witness formula (al-*Shahāda* and al-*Risālah*) which is not typical and does not appear on other weights of this type, especially those from Egypt. According to the inscription, the weight of the caliph al-Walīd was issued under his direct order. The name of the person who carried out this order is not mentioned. If the interpretation of 'bi-'l-Urdunn' is correct, it may have been the governor of *jund al-Urdunn* who carried it out (*al-Urdunn* is the new name given by the Muslims to *Palestina Secunda* after adding the coastal zone between Tyre and Acre). The year of issue of the weight, A.H. 87/A.D. 707, is the earliest date to appear on any known Muslim weight. The final line of the inscription indicates that the weight is 'a full meat weight'.

'Monuments Street'

The commercial activities in Umayyad Bet Shean/Baysān extended to some areas of the city that were not originally planned as shopping areas in Classical times. The most obvious example of this kind of modification is the conversion of 'Monuments Street' into a commercial area (fig. 14). Shops and other private buildings blocked the temple façade.[58]

[58] Tsafrir and Foerster (1997) fig. 49; Foerster and Tsafrir (1992) fig. 21.

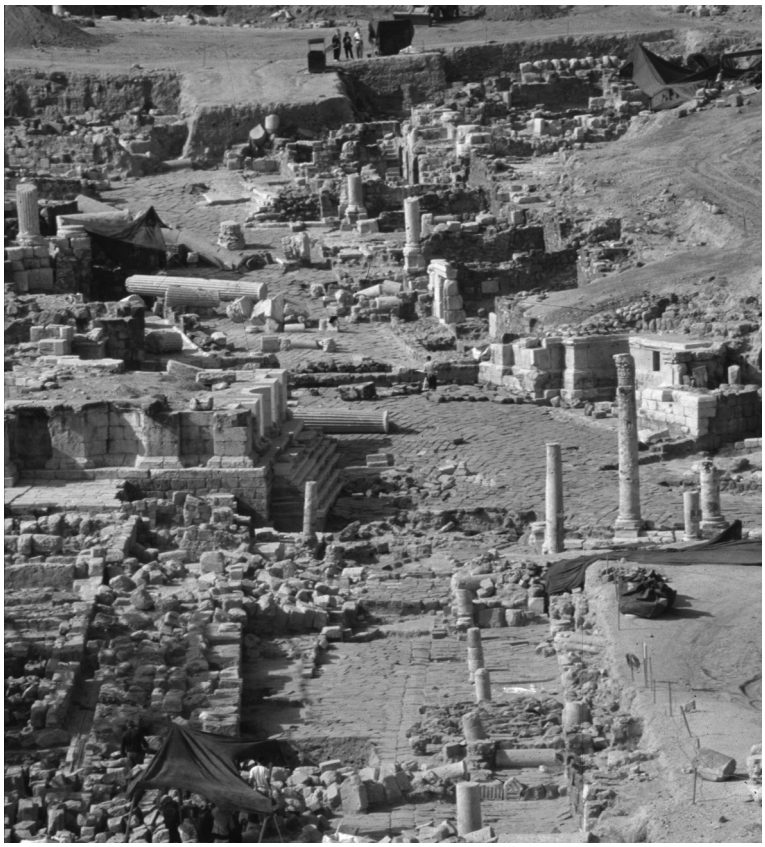

Fig. 14 'Monuments Street'.

In the nymphaeum, a row of shops was set up.[59] The space in front of the Antonius monument was also occupied by a shop (fig. 15).[60] In one of the new shops in the nymphaeum, an iron hoard containing many tools and objects was found under the debris of the earthquake. Many of them were found adjacent to the rear wall. Their location could indicate that they were originally hung on the wall (fig. 16). The large quantity of iron items in this place might perhaps indicate that this shop was used as a blacksmith's workshop. The iron hoard includes agricultural implements such as sickles, pruning hooks and knives. These

[59] Foerster and Tsafrir (1992) fig. 25.
[60] Tsafrir and Foerster (1997) fig. 50; Foerster and Tsafrir (1992) fig. 29.

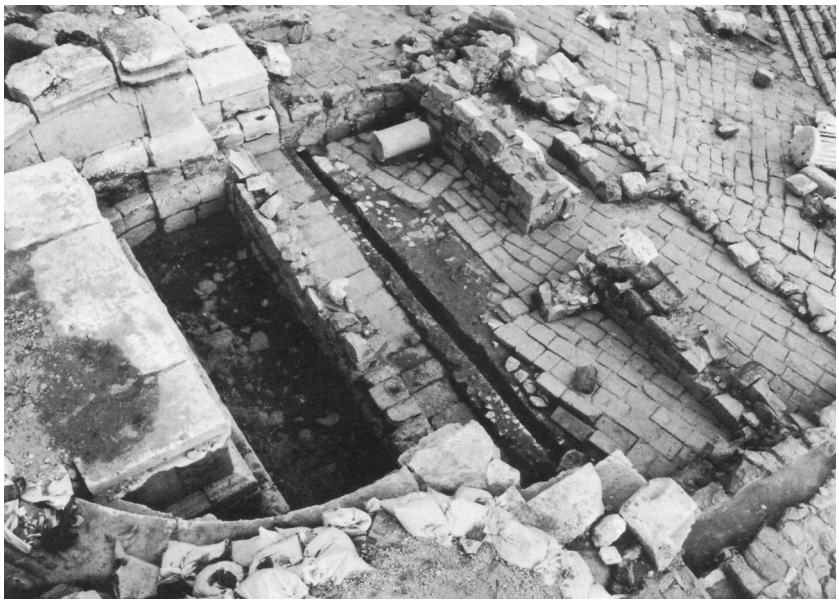

Fig. 15 A shop blocking the façade of the Antonius Monument.

Fig. 16 Iron implements as they were found in a shop built in the apse of the nymphaeum.

and other implements found elsewhere in the city are evidence of the agricultural activities that took place both in the city and in the fields surrounding it. Together with the agricultural tools, iron objects were also found relating to farm animals, such as shears, horseshoes, cow or camel bells, animal shackles, and chains together with other unidentified objects. This evidence indicates that some of the inhabitants of the city had other occupations, such as farming and agriculture.

Towards the end of the Umayyad period, the city centre of Bet Shean functioned as a commercial and industrial complex. As has already been pointed out, all the public buildings had been abandoned, but still stood in place as derelict monuments, still dominating the skyline of the city. The western bathhouse was abandoned. The sigma was used as a cemetery.[61] 'Palladius Street' was blocked with agricultural terraces.[62] The theatre and parts of the western bathhouse were used for industrial purposes.[63] 'Monuments Street' was also blocked by shops and by private buildings. Mosques were built in a number of places in the city centre, taking over older structures. The only parts of the city that persisted in their original function were the shopping streets. It seems that the people of the city were no longer interested in the public buildings, and confined themselves to commercial and industrial activities alongside practicing their religious beliefs.

The Ummayyad *Sūq* or Market Place

The only area in the city centre that was left without shops was the south-east side of 'Silvanus Street'. The good location of this street attracted new investors who constructed there a new *sūq*, or market place, towards the end of the Umayyad period (fig. 17). This commercial building comprised some 20 double-storey shops, with porticos supported by a delicate arcade on both the front and rear sides of the shops. On both sides of the collapsed south-east entrance gate to the shops, wall mosaics were found. These wall mosaics bear a dedication inscription that dates the erection of this marketplace to the year A.D. 737/8 following an order given by the Umayyad caliph Hishām, son of

[61] Tsafrir and Foerster (1997) fig. 29.
[62] Tsafrir and Foerster (1997) figs. 60–61.
[63] Bar-Nathan and Mazor (1992) fig. 51.

Fig. 17 Visualisation showing the south-eastern façade of the Umayyad marketplace.

'Abd al-Malik.[64] This was not only the first and solely Muslim market place to be established in Bet Shean, but is also the earliest one known to us in the entire Islamic world. The caliph Hishām was involved in many economic projects, and it is under his orders that many marketplaces were built all over the Umayyad Empire, especially along the international trade routes that connected the eastern and western parts of the empire.[65] Given Hishāms' great interest in business affairs, his energetic acquisitions of land, his building of marketplaces, his search for economic resources in Palestine, and his subsequent need for trading opportunities (in part to sell the produce of his private estate), it is quite possible that Hishām saw in the abandoned terrain near the commercial centre of the Umayyad Baysān an economic opportunity and decided to buy it to construct a marketplace. Furthermore, as was

[64] Khamis (2001b) 159–76.

[65] For some of the markets that were erected by direct order of the caliph Hishām, see al-Bakrī (1965) 25–26; 'Abd al-Ḥakam (1922) 132; al-Kindī (no date) 95; al-Samhūdī (1984) 749–53.

Hishām's habit, he financed the construction of the market so that it would remain his property. He levied taxes and derived an income from the enterprise, regarding it as a favourable investment. One of the interesting finds in this area of shops is a lead seal for a honey jar, carrying the name of the caliph Hishām. The jar was probably sent to Bet Shean from his private estates. We know that Hishām kept stocks of honey in warehouses in two villages on the Euphrates called al-Hanī and al-Marī.[66]

The contents of these shops were found sealed by the debris of the earthquake. Pottery, glass, and metal vessels, as well as remains of a wooden box containing gold coins and jewellery, were found in this shop (fig. 18).[67] Among the jewellery items were 5 bracelets (one intact, and 4 in smashed fragments, all with decorated snake head terminals), a pendant with three holes that were originally encrusted with semi-

Fig. 18 Gold coins, jewellery, pottery, oil lamps and a bronze jug from the Umayyad marketplace.

[66] Al-Balādhurī (1993) 16; al-Balādhurī (1957) 247.

[67] For some of the finds in the shops, see Tsafrir and Foerster (1994b); Tsafrir and Foerster (1994) 111–12; Brosh (1987) 8, fig. 3.

precious stones, and an earring, decorated with a palm tree flanked by two confronted lions. Even though these pieces of jewellery were probably worn by a Muslim woman, they are Sasanian and Byzantine in style. Among the other items of jewellery found in this shop were two silver seal rings, inscribed on their bezels with reverse Arabic script; these were probably worn by men. These and some other pieces of jewellery found in these shops are the earliest Islamic jewellery known to us. Silver *dirhams* and 31 gold dinars were also recovered. This hoard of coins has a very high archaeological value, because one of these dinars is dated to the year A.H. 131/A.D. 748/9. This is of great importance as additional evidence for dating the earthquake that devastated Bet Shean and other sites on both sides of the Jordan Valley. Several possible dates have been suggested for the earthquake, ranging between A.D. 746 and A.D. 749. According to Theophanes the earthquake occurred in the winter, on January 18th, or the 23rd of Shvat according to Jewish sources. The fact that the Hejra year, 131, starts on the 31st of August A.D. 748 proves beyond doubt that the earthquake occurred on January 18th—corresponding to the 23rd Shvat—of the year A.D. 749.[68]

The gold jewellery, together with the gold and silver coins and a pottery bottle filled with mercury, which was usually used in the gilding and in the making of jewellery, suggest that this shop was a goldsmith's workshop. The owner of the shop was rich enough to join together two adjacent shops into a bigger one, and to hold in his possession imported vessels like the blue-glazed jar, which was probably imported from Iraq or Persia, as well as a metal jug, glass bottles and a Jewish bronze oil-lamp (fig. 19). This oil-lamp was decorated with a free-standing menorah (of which only the stem has been preserved), a *shofar* (ram's horn), a *lulav* (palm branch) and an *ethrog* (citron).[69] Steelyard balances and typical Byzantine square and discus-shaped weights were also amongst the finds of this shop (fig. 20). The steelyard was preserved in good shape and shows the same modification features that defined the steelyard with empress counterweight found in the shop in 'Northern Street'. The counterweight of this steelyard is spherical and filled with lead. The steelyard maximum weighing capacity is 42 *ratls* or *litrae*.

[68] On the dating of the earthquake to A.D. 749, according to the numismatic finds and in light of the Jewish and the Christian written sources, see Tsafrir and Foerster (1992).

[69] Hadad (2002) no. 523.

Fig. 19 Finds from the Umayyad marketplace.

Fig. 20 Steelyard found in the Umayyad marketplace.

Conclusion

Bet Shean/Scythopolis flourished as a major and important commercial and industrial city in Palestine for almost one millennium, from the time it was founded in the Hellenistic period until it was destroyed by the A.D. 749 earthquake at the end of the Umayyad period. When the city was founded, its colonnaded streets were built with shops on both sides. Most of these shops constantly remained in use during the centuries, and many were uncovered in the course of archaeological excavation during the last 25 years. Some of the shops were rich in finds, especially from the later period of their occupation, before they were destroyed by fire, assaults and earthquakes. In the Byzantine period, shops were in general well-spaced along the porticoed streets and included workshops and taverns as well as shops selling everyday food commodities and vessels in a range of materials. The Umayyad shops were more crowded, in narrower streets. Some were newly built, and encroached on former public buildings and streets; others utilised the former commercial district at a greater density. Some shops of the Umayyad period can be shown to have been workshops, and there is also evidence that shops continued to sell commodities like vessels, as they had done in the Byzantine period.

Not all the shops and their finds can be presented in this brief survey. The shops and the other buildings and monuments in Scythopolis, as well as most of the finds, are still not fully studied and published, thus, some of the above conclusions and summaries should be considered as preliminary.

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AN UNUSUAL STRUCTURE ON THE LYCIAN ACROPOLIS AT XANTHOS

Anne-Marie Manière-Lévêque

Abstract

This article discusses the interpretation of an isolated one-room structure, excavated on the Lycian Acropolis at Xanthos. It contains a large oven, set back in its own recess, and number of unusual basins, cut into the rock, in which burnt material and a number of complete cooking pots were found. The possible function of this complex is discussed, in relation to a number of familiar hypotheses, which are then discarded. A detailed discussion is undertaken, of the design and working of the fixtures and finds recovered within the complex, and its urban context, in order to produce a more convincing interpretation.

Introduction

I have directed excavations on the Lycian acropolis at Xanthos since 1994, when I took over responsibility from Ch. Delvoye. In the same year, encumbered by the presence of an enormous fig tree, I wrongly identified a 'basin' and the base of a vault as a cistern.[1] Cisterns are common features at Xanthos, especially on the Lycian acropolis, and at the time this seemed to be the most reasonable interpretation of what was then only a partially excavated structure. The constraints of the terrain, as well as the circumstances of the current excavations, delayed a full examination of the sector, which finally started in 2002.[2] Two campaigns led to the discovery of an unusual installation, with occupation material of late 2nd to mid-3rd c. A.D. date, whose function still needs to be determined. But, a certain number of hypotheses can

[1] This 'basin', coloured in blue, is represented on the general plan of the Lycian acropolis published in the Xanthos volume of the *Dossiers de l'Archéologie*.

[2] Manière-Lévêque and Diesch in des Courtils and Laroche (2003) 435–39; Manière-Lévêque in des Courtils and Laroche (2004) 319–23.

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at least be discarded, through an analysis of the investment made in its architecture, the quality of its mortar finishing, the inner layout of the building, the artefacts recovered within from stratigraphic contexts, and the way in which the structure was integrated within the wider urban fabric.

Architectural Description

The installation is set directly onto the bedrock. It is situated between the remains of a defence tower of the Hellenistic city wall, to the west,[3] and the ruins of the Byzantine Acropolis wall, to the north and the east—an architectural context that illustrates the long occupation of the sector. The northern boundary of our complex is clearly determined, as its north wall has been integrated to the later Byzantine modifications. However, its eastern limit remains unknown. Indeed, the end of the south wall was fitted into the outer face of the eastern city wall and it is therefore impossible to locate its terminus. Successive modifications, from Hellenistic to Byzantine times, as well as some dismantling (such as the removal of the 'theatre pillar'),[4] have substantially obscured our understanding of the north-eastern corner of the establishment. In fact, the overall configuration of the late fortifications, as well as the position of the Hellenistic tower, remains hypothetical (fig. 1).

The structure is rectangular in shape (surface area: 13 m^2), with a recess (2.70 m wide) extending to the west. This recess occupies a higher position than the rest of the complex. The north and south walls are built over a first course carved into the bedrock, surmounted by two courses of well-carved rectangular limestone blocks, which are topped by a brick wall. All courses are bound by and covered with chalk mortar. The space was roofed by two parallel brick vaults (measuring: 38/39 × 33.5/34 × 9 cm) whose first courses are still visible in the south-west corner and in the north-south wall (fig. 2). The latter

[3] It represents the counterpart of the south tower, identified by ancient travellers; Metzger (1963) 2, 8, fig. 2. The outer face of the wall is built in orthogonal masonry provided with bosses. The two upper courses of the north wall have been modified later, most probably when our installation was built. According to H. Metzger, the Hellenistic fortress is dated to the 5th–4th c. B.C.

[4] This is a funerary pillar following the typical tradition of Lycian funerary monuments. A fragmentary inscription found on its lower part states it has been displaced. Unfortunately, the date of this operation has not been preserved; Demargne (1958) 107–12.

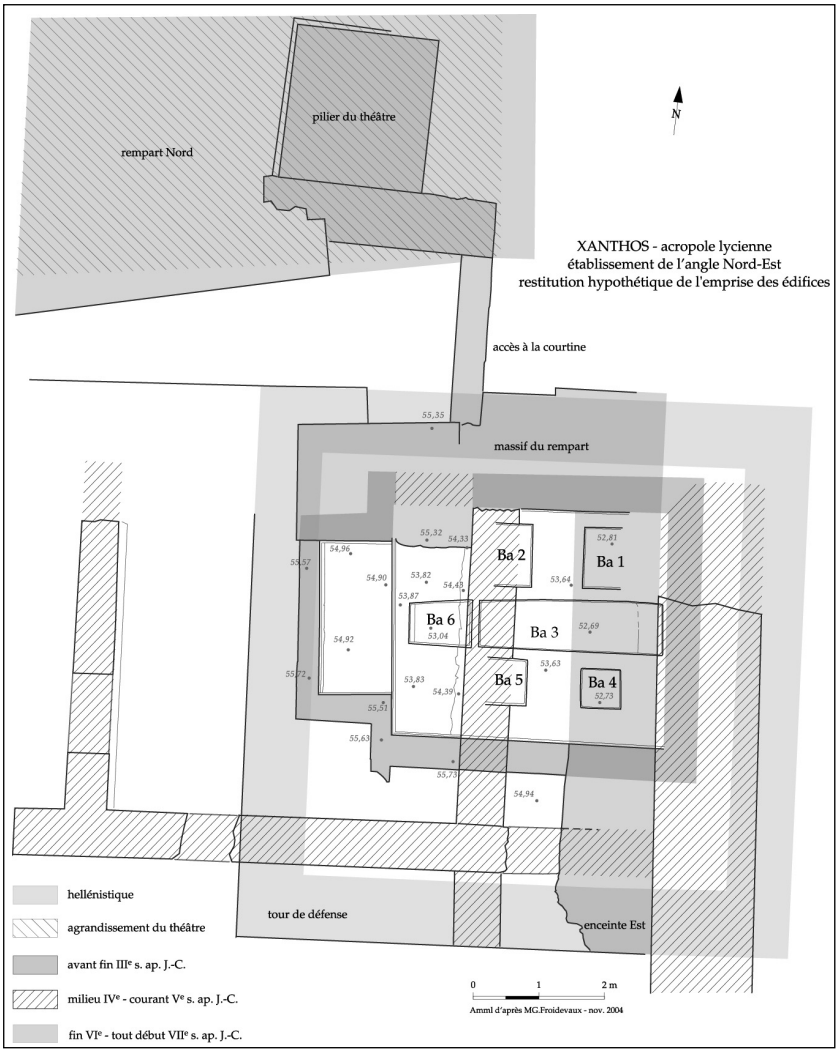

Fig. 1 Plan of the north-eastern establishment on the Lycian acropolis within its immediate architectural context.

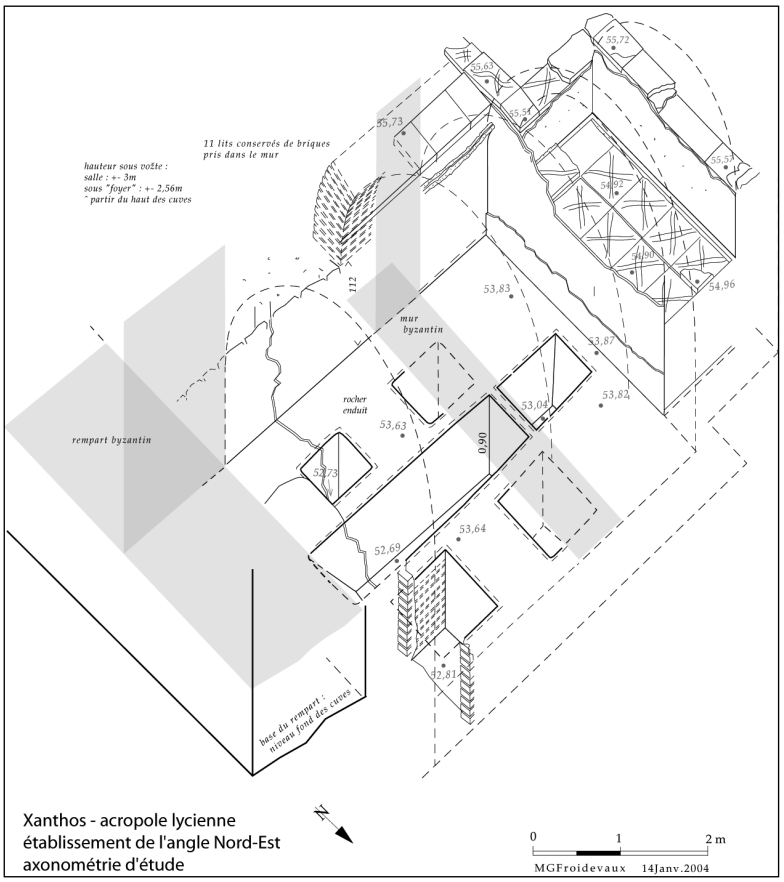

Fig. 2 Axonometric view of the north-eastern establishment.

(double-faced) was built later to divide the inner space in two parts, in the middle of the 4th c. A.D., when the structure had ceased to be used, destroying its vaults.[5] This phase involved the creation of two new rooms, located one and a half stories above the original ground level (bedrock). The remains of the structure are today located on the lowest

[5] The mid-4th c. date for this alternation was confirmed by the study of the pottery from the dump in the 'unidentified structure' and from fill contexts post-dating the construction of the wall; Pellegrino (2003) 215–21; Pellegrino (2004) 123–43. This date corresponds to a general phase of re-organisation in the houses of the acropolis, which is illustrated by the western sector and the northern portico of the great proto-Byzantine housing complex; Manière-Lévêque (forthcoming). Regarding the ceramic finds and the dating of this complex, see Pellegrino in des Courtils *et al.* (2000) 348–51; Pellegrino (2002) 245–60.

level of the acropolis, which is the same level as the eastern wing of the north-east housing complex, although this does not belong to the same chronological sequence.[6]

Our complex represents a completely isolated unit: it seems that the west and south walls, as well as the wall of the Hellenistic tower, were not provided with a door. Of the east wall, only the lowest course has been preserved, up to a height of 2.40 m. It was carved into the bedrock and was overlain by a repaired section dating to the mid-4th or 5th c. A.D. Yet a door opening into this wall, on top of the bedrock course, or at its northern end, is hardly conceivable. Thus it seems reasonable to suggest that the complex was accessed from the north, where a rupture can be seen in the embankment running along the north acropolis wall (undated but seemingly pre-Hellenistic). A door is probably covered by the blocking mass of the wall, immediately to the east of the recessed space of our complex (visible on fig. 2).

In terms of its internal layout, the installation can be functionally divided into two distinct units. To the east, the ground, which has been carefully levelled, reveals a large H-shaped pit, which extended over slightly more than half of the surface. The cavity, dug in one single phase, has been subdivided into two long compartments, following an east-west orientation, so that they lie perpendicular to the western recess. Along both sides of this middle alignment, 4 smaller compartments are located (fig. 3, Table 1).

All the dividing walls are made of half-bricks bound with mortar, as too is the floor revetment of the small basins (fig. 4). The same type of brick and mortar has been used in one, two or three courses to create

Table 1: Dimensions of the different compartments

Basins	Measurements (cm)			
N°	North/South	East/West	Depth	Estimated Volume
1	91 cm	unknown	83 cm	0.4 m³
2	90 cm	unknown	unknown	0.5 ³
3	64–77–76[7] cm	141 cm	95–90 cm	0.9 m³
4	57 cm	57 cm	90 cm	0.3 m³
5	73 cm	unknown	unknown	0.4 m³
6	57–64 cm	88 cm	60–78 cm	0.35 m³

[6] See Manière-Lévêque (forthcoming).
[7] These are a series of measurements taken from west to east.

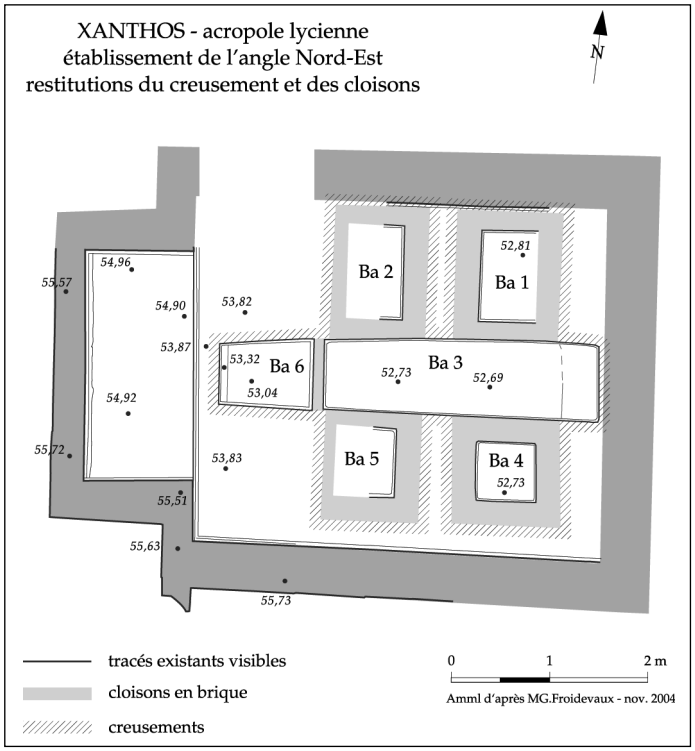

Fig. 3 Plan with reconstruction of the cavities and partition walls.

the sloping floor (12°), which starts 90 cm to the east of the large recess. Finally, all surfaces were coated with a whitish, well-smoothed chalk mortar: this extended over the floor and all vertical surfaces, including the walls and the façade of the recess, though it did not include the bottom of the basins. This revetment is extremely well-polished; furthermore, no cracks are visible, even on the edge.

The western recess, whose bottom is not visible due to the mortar coating, had a floor made of two courses of flat bricks. The upper layer has been almost totally destroyed, except for two fragments still *in situ*, one to the north, the other to the south. This second course is at a level of 110 cm above the floor of the main room. The bricks show a module of 48 × 48 × 5 cm, so that the long-axis of the room must have been roofed by a vault of approximately 4 and a half bricks, bound by means of thick mortar joints. It is worth mentioning that the bricks were laid in such a way as to cover the width of exposed joints, so that every joint of the lower course was covered by a brick

Fig. 4 Detailed view of the partition wall between basins 3 and 4.

in the upper layer. After the upper part of the floor had been laid down, all surfaces were covered by a whitish mortar. This became grey over time and was less polished than in the other part of the room; its surface is more granular, and shows a great number of cracks, repairs and unusual features. In the eastern part of the room, traces in the mortar confirm the presence of a short parapet, 25 cm high and 18 cm wide, which closed the recess to the east, where it opened into the main room (fig. 5). The second feature is more unusual. It consists of a series of 9 zones more or less circular in shape, visible on the west

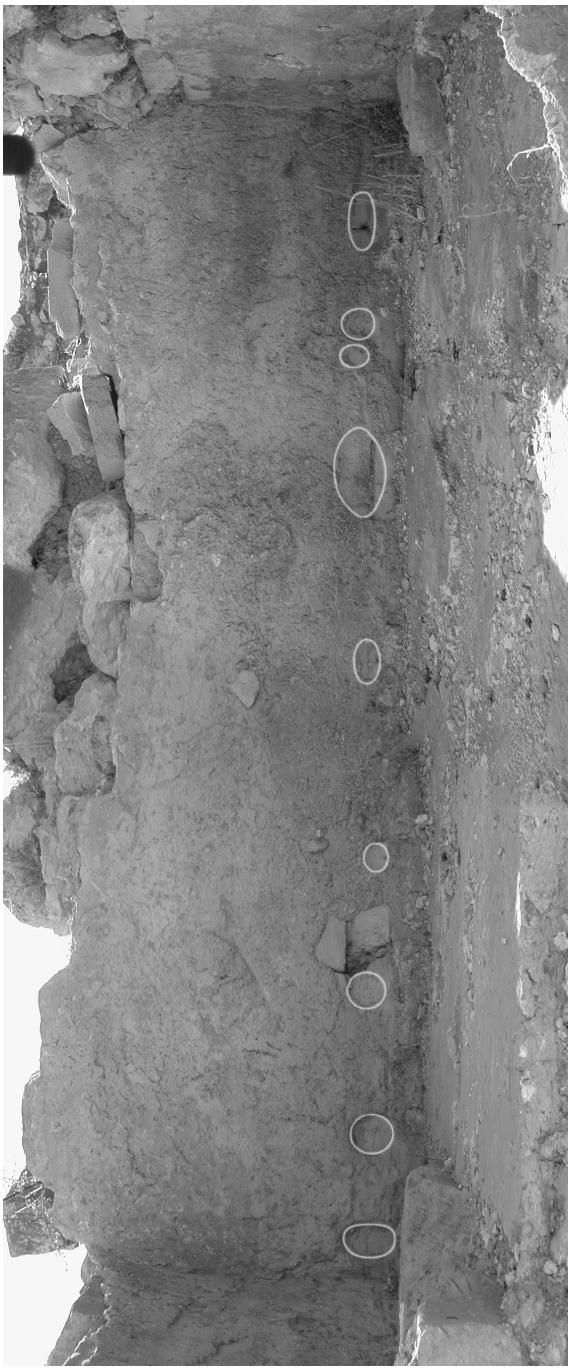

Fig. 5 View of the western wall of the hearth showing zones of repair in the mortar coating.

wall of the recess. In these spots, the mortar coating was absent, so that the brick masonry remained visible. All these zones are located at the same height: their lower part is less than 1 cm above the upper brick course. Black traces visible on the mortar imply the presence of a hearth in this area, as do rubefaction marks in the north-west corner, and a very loose layer of ash and dust noticed on top of the brick floor during the excavations.

Before suggesting a functional identification for this structure, it is useful to describe the lowest layers of the stratigraphy. The late subdivision wall described above was laid upon large blocks integrated into a destruction layer that sealed the 'fill' deposit found in the basins. This deposit represents a succession of filling events associated with a dump found in the biggest basin.[8] This is dated to the end of the 2nd or 3rd c., whilst building of the wall must date sometime after the very end of the 3rd or early 4th c., the date of material recovered from the fill layer beneath it.[9]

Every individual element that has been described so far can be associated with specific and well-known building functions. But the unusual combination of elements demands careful study, as no specific parallel can be identified for our installation as a whole. It is important to stress that the building, its fixtures and finishing belong to one single building phase, and one completely independent from any other building in the vicinity. This implies a level of coherence in the way the building was organised and used. But to define its function seems a very difficult task based on what is known about the habits and customs of the Xanthian population. I will first seek to discard a series of unlikely hypotheses, before suggesting a plausible interpretation.

Discarded Hypotheses

Workshop Producing Glass, Ceramic or Metal objects?

It is unnecessary to present here all the reasons why the installation cannot be identified as a workshop involved in the production of glass,

[8] See Pellegrino (2004) 123–43.

[9] The same chronological sequences have been discovered in the western aisles of the large *domus* on the acropolis. The stratigraphy will be fully described in Maniere-Lévêque (forthcoming).

ceramics or metal artefacts. There is no functional argument, nor production slags or misfired objects, which would favour this hypothesis. Apart from coins, the only metal artefact recovered from the excavations was a tripod fragment, probably used to support cooking pots. It was found in the upper part of the stratigraphy, suggesting that it did not belong to the same chronological sequence.

Unit for Processing Skins and Textile?

The most typical fixtures used for these activities are generally a heat source and basins set into the ground; however, usually the scale and organisation of these basins is very different to those of the Xanthian establishment. It is also important to note that the main entrance of the theatre, which was most probably still in use during the 3rd c., was located close to our installation (less than 10 m); the co-existence of a tannery with a theatre is really hard to imagine, principally because of the smell produced by the former. This kind of activity was generally located towards the suburbs. Furthermore, a tannery would require many more elements than those present in the case of Xanthos. It is worth remembering that the processing of skins prior to proper tanning required three rounds of washing and dipping necessitating a constant flow of water to be brought into and evacuated from the basins. This would have involved a complex network of drains. These are entirely absent in our building: none of the basins is provided with an evacuation device and their capacity remains very small, less than 0.5 m^3 for each of them. Moreover, the basins are organised within a very restricted space[10] that would not facilitate the storage of the necessary products (chalk and tannin), or allow for circulation of people around the basins and the proper processing of skin. Finally, the use of chalk—absolutely essential for tanning—can be excluded: it would have left traces on the floor and wall revetment, which do not exhibit any kind of damage, as stressed above. Furthermore, the use of any liquid in the basins—especially dyes—would have left traces on the white mortar, which is not the case.

[10] The estimated surface area is about 17 m^2.

Fullonica?

A *fullonica*, would require more or less the same type of fixtures as a tannery (basins etc.), as well as the use of soda and alkaline products, which are even more corrosive than chalk. Furthermore, archaeological remains,[11] and depictions of everyday life from Pompeii or Ostia, provide us with enough evidence to discard this hypothesis.[12] At least 4 elements visible at Pompeii are missing from the building at Xanthos: 1) rims around basins to prevent the overflow of dirty water into the rinsing basins; 2) a low wall used by the workmen to full the linen;[13] 3) a pressing area; and iv) enough space to permit drying. Furthermore, the organisation of space is different from that generally found in linen and textile processing workshops, where the basins, always small in size, are aligned along the walls and are set around larger basins used for rinsing. A similar organisation can be seen in the *fullonica* of Fréjus, where the largest basins, located on the periphery, frame a central area where three hearths are set, of which only the circular bases have been preserved.[14] It goes without saying that the supply and evacuation of large amounts of water would have been as important for a *fullonica*, as it was for a tannery, and that this was not provided for in the structure at Xanthos. Admittedly, it could have been possible to supply water by hand. However, it is more difficult to envisage the evacuation of dirty water in a similar way. From a practical point of view, it is impossible to empty a quadrangular basin without any drainage hole at the bottom; this even restricts the possibility of an efficient cleaning.

Taberna/Thermopolion?

In archaeology, one is frequently confronted by a wide range of buildings linked to food production, from bakeries to the *tavernae* for consumption of food or prepared meals. It is obvious that the establishment

[11] The most striking example remains Pompeii and the *fullonica* of Stephanus on the Via dell'Abondanza; Barbet *et al.* (2001) 140.

[12] The Pillar of the Verianus Ipsus *fullonica* at Pompeii.

[13] Furthermore, the distribution of the basins at Xanthos does not reflect that found in the most modest establishments at Ostia. See for instance the small *fullonica* on the *cardo*, building I.xiii.3, where the basins are aligned along a wall; De Ruyt (2001) 186–87, fig. 2.

[14] Excavations of the 'Espace Mangin' 2004, Ville de Fréjus/INRAP. Unpublished information gratefully provided by Michel Pasqualini, who I wish to thank here.

of Xanthos does not correspond to any known example of bakery or *thermopolium*. Indeed, the organisation of the building is completely different, and no significant artefact that favours this hypothesis has been recovered. At the same time, this type of space, provided with basins, is unknown in private housing, where most often a 'heating table'[15] is the only architectural evidence for the preparation of food. We know that common products used for the preparation of meals (at home as well as in taverns) were stored in amphorae, *dolia*, etc., that generally represent a high proportion of the ceramic evidence on such sites. Yet, at Xanthos, the proportion of storage vessels is only 10% of the total of ceramics recovered,[16] which all come from the dump found in the largest basin. This proportion is equally divided between amphorae and light-coloured fabric vessels (painted and unpainted).[17] This small percentage, found in association with a specific organisation of heating sources and basins, which lacks any parallel in private housing, workshops or shops, inevitably requires a new analysis of our data in order to suggest more convincing hypotheses.

The Key Arguments

It is normal in archaeology to interpret one's discoveries by comparing them exclusively with known, related cases. However, this method has its limitations, as most finds do not directly relate to the use of structures. Furthermore, it will never be possible to fully understand the many architectural solutions adopted for buildings that fulfilled a similar function. Although an 'inventory' of possible comparisons is an essential step in a serious scholarly analysis, it should not represent an aim in itself, but simply a way to reach our final objective. This is the reason why in our case it would be worthwhile, to develop a "*bilan raisonné de cet équipement technique*": a phrase used by Ph. Bruneau and P.-Y. Ballut in their definition of archaeology.[18]

[15] We are talking here about simply designed heating devices, without specific cover on top.

[16] For the analysis of the ceramics in layer 02/56, see Pellegrino (2004) 136.

[17] These percentages are very different to the ceramic evidence found in the residence of the acropolis, especially in the *tablinum*; Manière-Lévêque (forthcoming).

[18] Bruneau and Ballut (1989) 22.

The Function of the Lateral Basins

The 4 smaller basins are provided with double walls and a mortar coating, which is perfectly continuous and does not exhibit any crack or rupture in the manner it was laid down. This is not fortuitous. In fact, these technical characteristics reflect two principal aims. The first was to create not only basins with a restricted capacity, but also to isolate as efficiently as possible their contents from the natural bedrock substrate. This is confirmed by the way the cavities were dug: the operation was carried out in one single step, and if capacity alone had been the most important aim, it would not have necessary to dig into the bedrock in this way—an above-ground basin would have sufficed. Rather, the most significant factor behind the design of the basins would seem to be a desire to insulate against heat, ensured by the thickness (22 cm) of the brick walls. This implies high quality insulation, in modern terms, which would have ensured the maintenance of a regular and constant temperature. However, their small size suggests that this was for short-term storage, as only a small quantity of goods could be kept here. The second factor behind the design was a desire to guarantee perfect watertightness for the whole ensemble, and especially the basins**,** through a carefully applied layer of mortar. Incidentally, this also served to prevent intruders, especially vermin (rats, mice, etc.), from entering.

From these characteristics, we can conclude that we are not dealing with basins, but rather receptacles for the temporary storage of foodstuffs. The basins were probably designed to deal with 4 types of ingredients or finished products, perhaps differing from one basin to another. They were stored dry, or at most only slightly wet, as the mortar does not show any stains or discolouration. For the first category of materials, possible candidates are crops (in the shape of grains of flour), dried fruits (entire, or as powder or flour), beans, meat or dried fish.[19] The second category could be represented by all substances made from flour: dough, used to make pancakes, bread or cakes, but also everything that is preserved through salting: meat, sausages, fish or other fresh foodstuffs such as chicken, and principally aromatic herbs (leaves, flowers). This inventory, although partial, is very diverse; it is actually not possible to identify most of the foodstuffs that were stored in our establishment. However, we have at our disposal two

[19] This latter category seems less likely, as no fish bones, nor shells, were recovered from the excavations.

small pieces of concrete evidence: the presence of dried beans (a few only), in the dump found in the largest basin, and of bones belonging to small mammals, whose archaeozoological identification still needs to be undertaken.[20]

The Function of the Middle Basins

The conservation of produce seems to have been a less decisive factor in the design of the middle basins, as their walls are simply carved into the bedrock and coated with mortar. Should we then conclude that they were designed to store less fragile foodstuffs that still required some minimal protection? Unfortunately, the technical characteristics of each basin are insufficient to indicate the precise function fulfilled by each; the finds recovered from the excavation do not permit this either. Surprisingly, the ceramic evidence collected in the largest basin is made up entirely of complete objects. The two functional categories best represented are storage vessels (10%) and an ensemble of cooking pots (61%) (Table 2). This material is dated between the end of the 2nd c. and the middle of the 3rd c. at latest, due to the presence of a Knidian amphora and a handled goblet (type Mirabini Moes XLVIII). The presence of bones caught between the broken sherds of the cooking pots, and the bases of pots, which exhibit a black colour, testify to a rather violent episode that led to the deposition of the material in the basin. The word 'collection' seems actually rather weak to describe what happened. This must manifestly have been a sudden event, as implied by the presence in the dump of charcoal, on which the cooking pots had been laid.[21] Consequently, it is likely that the spot where these vessels were used—a hearth for warming up cooking pots full of foodstuffs—was located within our establishment. The western basin (Ba 6) exhibited a dark brown/blackish, loose fill, and a huge quantity of fine-grained ashes, indicating that a hearth was less than 20 cm distant.

[20] Are these remains those of rabbits, chickens…or simply traces of vermin? Their state of preservation does not allow any identification, except if done by a specialist. The same is also true of the organic food remains.

[21] It is rather easy to imagine the operation, as we might empty a table with one arm, to throw discarded objects and waste onto the ground.

Table 2: Proportional distribution of ceramic finds from the dump layer

Excavations 2002	Unit 56
Amphorae	5.56%
Attic Black Gloss	0.00%
Brown Slip	0.00%
African Red Slip Ware (D)	0.00%
Sandy Buff	0.00%
Common Ware	5.56%
Painted Common Ware	11.11%
Eastern Sigillata A	0.00%
Glazed	0.00%
Grey Ware	0.00%
Painted Grey Sandy Fabric	0.00%
Lamps	0.00%
Late D	0.00%
Mould-made Pottery	0.00%
Thin-Walled Ware	5.56%
Reddish Sandy Fabric	61.11%
Gaulish Sigillata	0.00%
Sigillata	5.56%
Red or Black-slipped Pottery	5.56%

The Operation of the Hearth/Oven

The most striking feature of the hearth/oven is its height from the floor, around 110 cm, higher than most modern working tables, which nowadays stand approximately 90 cm high. Access to it was obviously difficult, and this was even worsened by the presence of a wall surmounted by a parapet, so that the opening of the hearth was about 135 cm above the ground level. In these conditions, the supply of fuel and the handling of vessels must have been rather acrobatic, or even dangerous, especially as the western basin was located at a distance of less than 20 cm from the front of the hearth. Consequently, there was always a risk that the user might fall into the basin. This would seem to exclude the use of very heavy vessels, though even the use of light vessels would not make the operation of the hearth more rational. Seen from this standpoint, the building *cannot* work efficiently. It means that the right questions have perhaps not been asked, and consequently that we are missing information about the complex, which is obviously only partially preserved. The essential question here is to ask how such a heated mechanism was used; a first step would be to understand the

way it functioned. What typology might the installation at Xanthos belong to?

The discovery of such a structure without any clear parallels is remarkable. In the case of Xanthos, the most distinctive element is the isolated position of the heating place, located in the western recess of the complex. From an architectural point of view, it would have been much easier to design a room with a more regular plan and integrate the heating place within it, as in some domestic contexts at Pompeii, for example. However, if substantial efforts were made to distance it from the main functional area, this was most probably done to avoid heating up the latter space, and perhaps also to prevent the risk of fire. Indeed, the outer embankments along the north and south walls, and along the western Hellenistic tower seem to have been used as 'insulation' (against fire), within what is overall a very dense urban fabric.[22] This observation is important: our establishment seems to have been designed in a very elaborate way from the beginning, as a coherent ensemble.[23] The builder already had a good idea of the intended use of the space and the consequences of the heat produced. In fact, the architectural solutions he employed to build the heated recess facilitated both a gradual raising of the temperature and the maintenance of a constant and high heat level. The vault of the western extension, designed independently, and 50 cm lower than that of the other room,[24] increased the efficiency of the hearth, by reducing the volume of air heated. The parapet coated with mortar helped to retain heat within the recess, avoiding drafts and keeping charcoal inside. The last interesting element is the absence of an access under the hearth, which is not exceptional.[25] The absence or presence of inner arches/pillars did not interfere with the way that the hearth functioned, as the floor was continuously covered with charcoal,[26] although it did affect the quantity

[22] Our structure is in fact built against a division wall with another property, about which see Saliou (1994) 62–64. It is worth mentioning that Proculus, in the *Digest*, despite establishing a distinction between *focus* and *furnus*, treats them in the same way. Was there at that moment a discrepancy between 'law' and practice, as it is the case nowadays, or was the Xanthos '*fornus/focus*' a clever means of breaking the law?

[23] This is proved by the interconnection of the walls of the furnace with those of the room.

[24] We are dealing here with estimates. M.-G. Froidevaux rather suggests a height of 1.20 m above the floor level, which means that the opening was not higher than 1 m.

[25] On domestic hearths, see Blanc and Nercessian (1992) 54.

[26] We are dealing here with a hearth set into a solid mass, only accessible from above.

of heat that could or could not be distributed over the recess. It is obvious that the conception of the Xanthian installation as a solid mass was conceived in order to avoid the radiation of heat into the main room and to maintain a constant temperature within the hearth.

To summarise, our installation is rather different from Roman examples from the western Mediterranean, especially from Pompeii. It combines the advantages of a hearth (floor and parapet) with those of an oven (the vault and the heating capacity). These two heating devices have a specific way of working: the former involves direct cooking upon a layer of charcoal, the latter an indirect cooking, by means of a heat restitution process described by J.-P. Adam in his book *La Construction romaine*.[27]

Our installation at Xanthos is a compromise between an oven and a hearth, as expressed through the diagram shown here. From what we know, the production of charcoal by a continuous fire can be excluded, as the parapet restricted the oxygen input required by combustion, unless there was a second opening; there may have been such an opening, but unfortunately the condition of preservation of the structure means this question cannot be answered. The only clues at our disposal are colourimetric and difficult to exploit without a comparative study at a regional scale. However, it is worth mentioning that all the bricks composing the lower layer of the floor are discoloured, which indicates that they were burnt. Indeed, even just a smooth cleaning was sufficient to cause their surface to disintegrate. This implies that the whole surface of the hearth was in use, whereas the discolouration of the mortar on the walls (blackening and rubefaction)[28] is more visible on the northern half but gradually disappears towards the south. This phenomenon is perhaps linked to a differential preservation rate of the structure: to the north, it is sheltered by the Byzantine fortification, still 2.10 m high. Only a micromorphologic analysis of the material could produce more information.[29] Despite this, the use of charcoal for cooking is justified by the presence of the parapet.

The second indication of direct cooking is related to the arrangement of the floor: this represents the main lacuna in our description, as mentioned earlier. Unfortunately, the absence of any object recovered

[27] On the bakers' ovens at Pompeii, see Adam (1984) 349.

[28] A macroscopic examination indicates that the temperature in our structure reached about 600°C.

[29] Regarding this kind of analysis, see Fechner *et al.* (2002) 311–62.

from the excavation hinders us from reconstructing this area. However, the number of possibilities remains rather restricted: only metal and clay could stand both an intensive use and large temperature variations. The first solution would have been very expensive, so I tend to favour the second, taking the shape of cylindrical clay bars. These bars can be deduced from the 9 zones in the western wall of the recess, where the mortar coating is absent. It seems that the hearth was equipped with a series of parallel bars (diameter: 4 to 9 cm), laid directly onto the floor at a more or less regular distance and fixed into the mortar coating of the walls.[30] Traces in the mortar on the walls indicate they were brutally dismantled, in order to collect and reuse the upper course of bricks composing the floor. This probably led to the disappearance of the lateral parapet to which they had to be attached, which makes it impossible to assess if they covered the whole width of the floor and if their diameter was constant. Was the function of these bars to stabilise cooking pots of a similar type to those found in the dump deposit? The intervals between the clay bars would allow the cooking pots with different diameters to be placed there: 10.5 to 12.5 cm, 16.5 to 19.5 cm and 30 to 30.5 cm. The smallest diameter of the ceramic vessels recovered is between 17 and 21 cm. According to this hypothesis, it would be possible to place the cooking pots in one direction only, except if several cooking pots were lying against each other. This possibility will be left at this stage and remain here a working hypothesis.

According to the analysis undertaken here, only one thing can certainly be concluded: that the clay bars represented a functional arrangement of the hearth. Organised in a specific network, the intervals between them were used to hold the charcoal; at the same time, they guaranteed the circulation of sufficient air. From this functional perspective, the clay rolls were in fact similar to the grille in modern fireplaces, whose bars need to be sufficiently widely spaced to allow for optimal functioning. The fact that the 'fire level' was raised justifies the presence of the parapet and eliminates the disadvantages mentioned above. Our installation, a perfect compromise between a hearth and an oven, was in fact designed for a great variety of preparations. However, this variety is not reflected in the spectrum of ceramic shapes recovered.

[30] This is different from cylindrical kilns with clay bars used to fire ceramics during the Islamic period. Except for 5 western examples (Murcia, Saragossa and Marseille), their geographic extension is restricted to Syria, Lebanon and Iran. See Thiriot (2000) 18–19.

Ceramic Shapes found in the Dump, possibly functionally associated with the Hearth

The most common ceramic shape is a high, cylindrical vessel with a rounded bottom accompanied by a clay stand,[31] whose ceramic prototype belongs to the same chronological sequence. This ring is less than 2 cm high, which means that its function was to stabilise the vessel without raising it too high from the fire. This example would support the hypothesis of a high temperature cooking process using charcoal. Cooking would have taken place in the middle of the hearth, where sufficient intervals between the clay bars would allow the vessel to be placed. It is then fairly easy to reconstruct the whole process, in a space that is finally fairly rational: the parapet of the hearth was wide enough to accommodate three large cooking pots before putting them on the fire, while the charcoal was being prepared. The western basin (only 20 cm from this point) seems to be the ideal place to collect the ashes when the hearth was cleaned.

If we now consider our establishment as a whole, it seems simple to summarise the way that it functioned: in one room, basins/receptacles were intended to store fragile (perishable) and more robust foodstuffs. On the other side, an elevated hearth of a relatively restricted size (less than 20 m^2) was ideal for attaining and maintaining a high temperature. It seems that we can find here an explanation for the height difference between the storage room and the heated area: the designer of our building was able to combine into one single project the constraints of both conservation and cooking, within a relatively confined space.

The Function of the Complex

Whilst the coherence of the design of the complex can now be accepted, some practical difficulties remain. It is common in archaeology for excavators to fail to appreciate the difference between what is left of a building and what was once there, but has since disappeared. In the case of Xanthos, the architectural structures are rather well-preserved, whereas the finds represent only a small part of the material assemblage that must have been present in antiquity. Furthermore, architectural fixtures in perishable materials are completely missing. Where were

[31] Pellegrino (2004) 127, fig. 2: 12.

the shelves designed to display vessels for drawing and pouring, and mortaria, pestles, etc., as they are depicted on the 'kitchen' mosaic of Marbella (Spain)?[32] In the *Casa di Nettuno e Amfitrite* at Herculaneum (V, 6–7) a number of very practical wooden devices allowed the user to have at his disposal all the utensils he needed. It would be astonishing if similar wooden furniture was not present in the richly wooded region of Lycia. On many local funerary reliefs—representing the deceased in their everyday activities—closets, cupboards, counters, tables, trestles and stands, platforms,[33] and step-ladders are typical objects depicted. In the case of our installation, some kind of wooden flooring—perhaps provided with a step—most probably covered the western basin. In fact, a repaired area visible in the mortar coating on the wall below access to the hearth[34] is likely to reflect a worn zone perhaps caused by friction generated by the presence of such a device, which has disappeared.

We have seen that the installation of Xanthos is unusual and different from all known examples. The way in which the hearth was organised, with the same space used for both combustion and cooking, is a typical characteristic of the long tradition of Aegean domestic ovens.[35] However, this observation cannot help us to assess the duration required to cook the foodstuffs nor their nature, and consequently does not help us to identify the everyday role of the establishment. Are we dealing with a collective oven, open to several households, or an artisanal facility, similar to the *thermopolia* of Pompeii? It seems hard to draw definitive conclusions. Nevertheless, the integration of the complex within the urban fabric seems well-thought out. Indeed, being located in front of the theatre funerary pillar, our installation was close to a major crossroads. Here, the road joining the main gate to the agora, and the entrance of the theatre, met with a great east-west axis. The function of this thoroughfare, brought to light in 2002,[36] was to ensure a connection, through a monumental staircase, between the eastern lower agora and the valley, where two great bath establishments were located, to the east of our crossroads. The spot must have been frequented every day by a large number of Xanthians.

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[32] Blanc and Nercessian (1992) 59, fig. 70.

[33] For example on a funerary relief from Ostia; Descoeudres (2001) 416, VIII.8 (Ostia Antiquarium inv. no. 14260). It depicts a man forging a pick-axe, perched on a kind of four-footed platform.

[34] The zone is irregular but made with care, at about 25 cm above the ground level to the south, and 50 cm to the north.

[35] Prevost-Demarkar (2002) 223–37.

[36] Cavalier and des Courtils in des Courtils and Laroche (2003) 429–31.

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Fig. 3. Plan with reconstruction of the cavities and partition walls.
Fig. 4. Detailed view of the partition wall between basins 3 and 4.
Fig. 5. View of the western wall of the hearth showing zones of repair in the mortar coating.
Table 1. The dimensions of the different compartments.
Table 2. Proportional distribution of ceramic finds from the dump layer.

Diagram: Functional description of the furnace.

Legend of the diagram:

'Foyer': hearth
'Sole': oven floor
'Rebord': parapet
'Voûte': vault
'Four': oven
'Chaleur interne': inner heating
'Feu direct pour la mise en chauffe': fire used to begin initial heating
'Braises': charcoal
'Cuisson': cooking

DRESS

DEFINING PERSONAL SPACE: DRESS AND ACCESSORIES IN LATE ANTIQUITY

Maria G. Parani

Abstract

Late antique dress in its diversity offers a mirror to the heterogeneity and complexities of late antique society. This paper presents a brief overview of the attire of various social groups in Late Antiquity—beginning from the imperial court and reaching down to the professionals of the world of public-spectacle—as this may be reconstructed from the archaeological, the written, and the artistic records. Its purpose is to highlight the importance of clothing and accompanying accessories as eloquent signs in an intricate communication system that enabled individuals and groups to articulate their identity and express it outwards in different physical settings and in a variety of social contexts.

Introduction

In the 7th c. collection of the Miracles of St. Artemios we hear of a man who, while spending the night in the church of that martyr at Constantinople hoping to be healed by the saint's grace, encountered another man who was dressed in a tunic (στιχάριν) fastened at the waist with a belt (βαλτίδιν) and who had a deacon's narrow stole, an *orarion*, around his neck. There was no church-service going on at the time. The sick man was initially puzzled because the unknown man did not wear a mantle (χλαίνη). He assumed, however, that the man must have felt encouraged (τεθαρρηκώς) to move around in such a guise because the church was his home. Following the ardent prayers of the stranger without a mantle, the sick man was miraculously healed. It turned out, of course, that the unknown man was St. Artemios himself; consequently, the church dedicated to him was indeed his home.[1]

[1] Crisafulli and Nesbitt (1997) 166–70, 276.

L. Lavan, E. Swift, and T. Putzeys (edd.) *Objects in Context, Objects in Use* (Late Antique Archaeology 5 – 2007) (Leiden 2007), pp. 497–529

In this account, personal space is defined physically, as one's own house, where, naturally, one could go about without a mantle even in the presence of visitors. Personal space—the home—is, moreover, contrasted to a public place of worship—the church—where, apparently, a different, more formal, dress code applied. True, the saint's lack of conformity with the norm was a dramatic literary device employed by the anonymous author to engage the interest of his audience and alert it as to the true identity of the cloak-less figure, which was going to be revealed only later in the story. Yet, it would not have been a successful device unless it challenged the sense of propriety of the audience (as it did of the protagonist) by what appeared, at first glance, as a sign of disrespect to the sanctity of the place that demanded an explanation.

Personal space, however, may also be perceived in other, more abstract ways and not just in the physical, architectural terms of the private domestic context or workplace. It can be related to the identity and self-perception of the individual, in which case it can be defined by various patterns of behaviour and activities, rather than by architectural barriers, and, as such, it may be asserted in a variety of different physical settings. Dress is one of the most important means by which an individual constructs and projects his or her identity outwards and by which this identity is perceived by others within the framework of social interaction. Gender, age, family status, religious beliefs, ethnic origins, cultural affiliation, profession, social position, and economic condition, as well as personal tastes and preferences, are all expressed in the choice of dress and accessories, as well as in the adoption of particular hairstyles and make up. As individuals progress through successive stages in life and as their fortunes rise or fall, their attire changes accordingly. Outfitted in correspondence with their personal circumstances and choices (and in agreement with current social conventions and expectations), they move through different spheres of activity and through different physical environments, both in the private and in the public domain. Changes in attire according to the demands of various occasions can highlight different aspects of a person's identity, sometimes putting the stress on his or her individuality, sometimes underlining his or her membership of a particular social or professional group. On the other hand, intentional non-compliance with socially accepted dress codes may be construed as a defiant assertion of individualism, as a conscious denial of one's rank, or as an aspiration to a status other than one's own. It might even be regarded as criticism of, or a challenge to, the established order, which could, in its turn, reassert and protect

itself with the promulgation of regulations regarding the proper attire of different social groups.

In what follows we will examine secular dress and accessories in Late Antiquity—understood here to span the period between the 4th to the mid 7th c.—looking not so much at the diachronic, typological development of different types of garments, as at the attire of various socially and economically defined groups on a variety of occasions. This survey, which tries to combine archaeological, written, and pictorial evidence from both the eastern and western parts of the Empire, is by no means exhaustive. Rather it focuses on certain characteristic examples, taken from different levels within late antique society. Its purpose is to present a glimpse of the diversity in attire that existed in the period under consideration and to highlight the complex role of dress both in constructing and mirroring identity and status.

Dress and Status in Late Antiquity

The survey begins with the higher echelons of Byzantine society, with the official dress of the emperor and the state functionaries. By 'official dress' I mean the prescribed attire of the emperor and late antique dignitaries that was characteristic of their rank and was worn by them while executing their duties and when participating in the ceremonial life of the court. Late antique official garb was distinguished by the exclusive use of certain items of dress and accompanying insignia that served to differentiate the bearers from the rest of the population and make them immediately identifiable as members of the elite world of the court.[2] In fact, there is ample written evidence to suggest, that certain items of dress and official insignia, for example the belt, came to be equated both in the common parlance and the legal language of Late Antiquity with the concept of the actual office or rank they were meant to designate.[3] Within the ruling class itself, hierarchical order was encoded in the use of particular garments and accessories and in the variation of materials, colours, and certain types of ornament that denoted rank.

[2] Cf. Delmaire (2003) 87 quoting Ambrosiaster according to whom one recognised the senators and the officials by their garments.

[3] The relevant evidence is discussed by, among others, MacMullen (1964) 447–48; Delmaire (2003) 87; Delmaire (2004) 197. See also below.

The emperors reserved for themselves the use of silk cloaks and tunics dyed in their entirety with true purple from the murex shell, as well as the use of decorative attachments for garments woven with gold thread.[4] Given the political significance of purple as the distinguishing sign above all others of imperial authority, a significance amply reflected in the writings of late antique authors,[5] it is not in the least surprising to discover that one of the first symbols of imperial power appropriated by pretenders to the throne was a purple mantle nor that an imperial decree of A.D. 424 stated that the manufacture and concealment of purple garments by any man was a crime similar to high treason.[6] Equally exclusive to the emperor was the use of gems and pearls for the adornment of the brooch that held his mantle of state in place. The brooches of officials were to be made only of gold, without gems, though elaborately worked. Men, in general, were allowed to use precious stones only in the bezels of their rings. Interestingly enough, the use of precious stones for female jewellery was not prohibited;[7] perhaps, the imperial government did not consider this as an infringement on its prerogatives that could be concealing more dangerous political aspirations. Last but certainly not least, the emperor was distinguished from his officials by the use of the imperial crown, the unmistakable mark of his sovereignty, which, by the 5th c., had become a solid circlet of gold, decorated with rows of pearls and gems, a great central jewel above the forehead and chains or strings of pearls with pendant jewels (*prependoulia*) attached to its lower rim.[8] Late antique officials, on the other hand, did not wear hats or other head-dresses as part of their official attire. The so-called 'Tetrarchic hat' possibly had military associations,[9] but its use, apparently, never became widespread and went out of fashion very quickly.

The characteristic attire of late antique officials, military and civilian, with the emperor at their head, was the so-called the *chlamys*-costume,

[4] Cf. Reinhold (1970); Delmaire (2004) 199–201.
[5] Cf. Delmaire (2003) 90–92.
[6] *Cod. Theod.* X.21.3. Cf. *CAH* XIII, 144.
[7] *Cod. Iust.* XI.12.1.
[8] Stout (1994) 88–89.
[9] Such a hat was worn, for example, by three men of authority at Piazza Armerina at the beginning of the 4th c., as well as by the Tetrarchs in the famous porphyry complex in Venice; also by anonymous soldiers on some late Roman sarcophagi and by elite men in certain early 5th c. ivory panels, see Carandini, Ricci and de Vos (1982) figs. 16–17; Kitzinger (1977) figs. 5–6, 35–38, 41–42, 77, 83. Cf. Croom (2000) 68.

named thus after its most distinctive element, the *chlamys*, a sleeveless, ankle-length cloak of semi-circular cut that was fastened at the right shoulder with a brooch (fig. 1). Attached at the vertical edges of the cloak was a pair of *tablia*, square or rectangular textile panels of a colour and decoration different from that of the rest of the garment. The imperial *chlamys* was purple with golden *tablia*, while the bejewelled brooch that kept it in place was circular in shape with three pendant jewels suspended from chains. On the other hand, the *chlamys* of late antique dignitaries was often white with a pair of purple *tablia*. It was fastened at the right shoulder by a brooch that belonged to a distinctive type known as the 'crossbow brooch'.[10]

The fact that officials shared the same type of dress as the emperor marked them all as members of the same establishment, with the emperor as the source of all offices and dignities and the officials as the recipients and the executors of his delegated power.[11] This concept is given pictorial expression in the famous commemorative silver plate of Theodosius I, now in Madrid, dating to A.D. 388, on which a *chlamys*-clad official is depicted receiving what is probably his codicil of appointment from the emperor, who is arrayed in similar apparel.[12] It would not be an exaggeration to claim that in the consciousness of the people in Late Antiquity, certainly after the 4th c., the concept of belonging to the administrative or military establishment of the empire was best expressed by the *chlamys*-costume. Already by the 4th c., members of both the central and the provincial administration of the state often chose to have themselves portrayed in this attire[13] (fig. 2, left) and, if we are to trust our hagiographic sources, even a simple woman working in a bath at Constantinople was expected to be able to identify a member

[10] Portraits of emperors and officials wearing the *chlamys* have survived in a variety of media; see, for example, Delbrueck (1929) nos. 2, 64, 65; Delbrueck (1933) pls. 94–97; Inan and Rosenbaum (1966) nos. 242–43; Smith (1999) pl. II. To my knowledge, there are no extant examples of the imperial circular brooch with the three pendant jewels, though certain imitations are known from archaeological contexts in Slovakia and Romania; cf. Stout (1994) 85–88; Schmauder (1998). On the contrary, the crossbow brooch of late antique officials is well attested in the archaeological record; Yeroulanou (1999) 52–54, nos. 170–79; Swift (2000) 3–4, 13–88.

[11] This relationship was made even more explicit in the case of those officials, who were entitled to wear garments adorned with an imperial portrait, highlighting thus both the legitimacy of their authority and their proximity to the emperor; cf. Delmaire (2003) 96–97.

[12] For an interesting recent discussion of the *missorium* of Theodosius and its iconography, see Leader-Newby (2004) 27–39, 47–49.

[13] Smith (1999); Harlow (2004b).

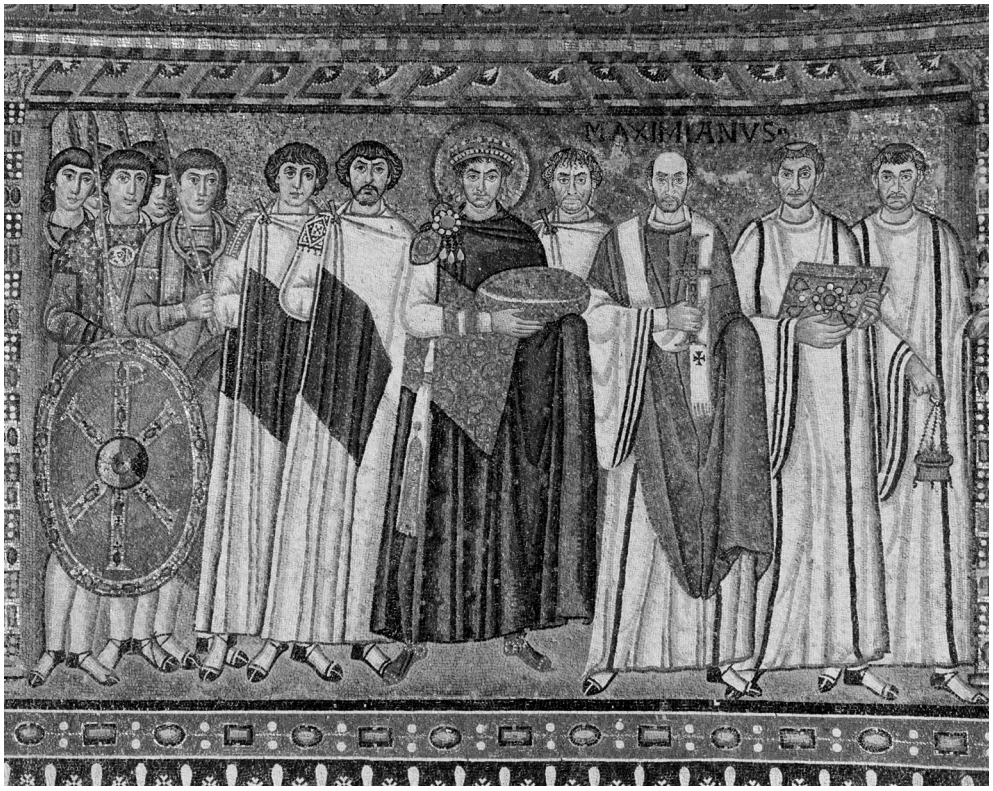

Fig. 1 Ravenna, San Vitale (*ca.* A.D. 547). Justinian, bishop Maximian, clergy, officials, and imperial bodyguards. (© 1990, Photo Scala, Florence)

of the imperial circle by his tunic, his belt, and his *chlamys*.[14] Equally revealing in this respect is the fact that when Christian art was called upon to find the appropriate means to portray male martyrs, most of them young soldiers who had died for their faith and who by their martyrdom had won a place in the Heavenly court, it chose to portray them wearing the tunic, the *chlamys* and the crossbow brooch of the members of the earthly imperial court, confident that the significance of this portrayal would not be lost on its audience.[15]

The *chlamys*, initially a military cloak, was adopted as part of late antique official dress during the course of the 4th c. It was, in fact,

[14] Crisafulli and Nesbitt (1997) 96.
[15] See, for example, Kitzinger (1977) figs. 156, 169–70, 189–90, 210.

Fig. 2 Berlin, Staatsbibliothek, Stiftung Preussischer Kulturbesitz. Ivory diptych of Rufius Probianus (*ca.* A.D. 400). (© Bildarchiv Preussischer Kulturbesitz, Berlin, 2005)

as we shall see, one of a number of items of military dress that had found their way into civilian official attire as a result of both the political and social ascendancy of high-ranking soldiers at the time, and of the military's instrumental role in shaping the character of late antique bureaucracy and administration, (even to the degree that civilian service could on occasion be regarded as *militia*).[16] The military associations of the mantle were, however, apparently still alive in A.D. 382, when an

[16] Smith (1999) 176–78; Harlow (2004b) 59–62, 66.

imperial edict forbade senators residing within the walls of Constantinople to wear this 'awe-inspiring military cloak' (*chlamydis terrore*); instead, they were instructed to wear ordinary, civilian cloaks for daily activities and the traditional outfit of their order, the toga, when participating in formal meetings or other official occasions.[17]

The men wore their *chlamys* over a knee-length tunic with long tight sleeves.[18] The tunic was adorned with decorative woven elements at the shoulders, neck, cuffs, and hem, in agreement with late antique styles, to which we shall return later. The decorative elements of the imperial tunic were elaborated by the use of gold thread, a marker of the high rank of the bearer that distinguished him from his tunic-clad officials. The tunic was girt at the waist with a fabric or leather belt (*cingulum*) with metal belt-fittings. That of the Praetorian Prefect of the East in the 6th c. was made of red leather and had a gold buckle and a gold belt-plate shaped like a bunch of grapes.[19] The belt was yet another article of dress with military associations that had become one of the most important insignia of late antique officials, be they military or civilian.[20] In fact, according to St. John Chrysostom, no official dared appear in front of the emperor without his *chlamys* and his belt,[21] as this would have probably been regarded as a sign of disrespect or, more dangerously, disobedience to the imperial authority that had dispensed the offices and dignities that the *chlamys* and belt stood for. The phrases 'to put on the belt' or 'to put the belt aside' were commonly used in late antique sources to describe the assumption or surrender of office respectively, while the violent removal of the belt signified the deprivation of the office that one held.[22] Conscious of the significance of the belt as an emblem of office and authority understood by all, a certain Theodore chose to have himself portrayed, in words as well as in pictures, receiving the belt of the Master of Offices from the hands

[17] *Cod. Theod.* XIV.10.1.

[18] On the long tight sleeves as an element of non-Roman dress introduced into late antique attire by the 4th c. under the influence of the dress of barbarian soldiers in the late Roman army, see Harlow (2004b) 54, 58.

[19] Lydus *Mag.* (ed. and transl. Bandy (1983) 102, 104).

[20] For a discussion of the military associations of belt-buckles and potential manufacture in state-controlled factories, see Swift (2000) 1–3 with earlier bibliography.

[21] Joh. Chrys. *Hom. in Ep. I ad Cor.*, *PG* LXI. 218.

[22] See, for example, Malalas (ed. Thurn (2000) 292, 406, 423); Lydus, *Mag.* (ed. and transl. Bandy (1983) 220). See also Delmaire (2003) 87; Delmaire (2004) 197, n. 6.

of an archangel.[23] To Theodore and his contemporaries, this was an unequivocal statement of God as the ultimate source of all earthly distinctions in general and of Theodore's own power in particular, which, seen in this light, received divine sanction and could therefore be exercised uncontested.

The tunic was worn over a pair of tight trousers or leggings (περισκελίδες), which, if we are to judge by the detailed representation of this item of dress in the frescoes of a late 4th c. tomb at Silistra in Bulgaria, covered the foot as well as the rest of the leg and were secured at the waist with a belt.[24] White leggings, encasing the feet and the legs, are described by John Lydus two centuries later, as part of the official attire of the patricians,[25] and purple ones are depicted worn by emperor Justinian in the famous panel at San Vitale in Ravenna (fig. 1). The footwear associated with the *chlamys*-costume, the so-called *kampagia*, actually allowed the feet encased in the trousers or leggings to remain visible, since these flat shoes only covered the toes and the heel and were fastened around the ankles with latchets.[26]

Archaeological evidence suggests that trousers with integral feet were of Germanic origin and must have infiltrated initially the Roman military and, later, during the course of the 4th c., civilian dress through the medium of soldiers and high-ranking officers of Germanic extraction in the Late Roman army.[27] Interestingly enough, an edict of A.D. 397 forbade the wearing of trousers—*bracharum*—and (Persian?) boots—*tzangarum*—within the city of Rome on pain of perpetual exile.[28] It is, of course, possible that this prohibition did not refer to the leggings just described, which were worn beneath the tunic and which had become part of late antique dress by that time, but to the ample trousers that did not cover the foot and were characteristic of oriental dress.[29] Whatever the particular details of its genesis, this edict seems to have stemmed from the imperial government's concern to safeguard

[23] The portrait is described in an epigram by Agathias Scholastikos in the *Anth. Pal.* (Book I, no. 36); see Waltz (1928) 25–26; Mundell Mango (2002) 62–63.

[24] Dimitrov (1962) fig. 5.

[25] Lydus *Mag.* (ed. and transl. Bandy (1983) 30, 32).

[26] Lydus *Mag.* (ed. and transl. Bandy (1983) 30, 32). The *kampagia* of officials were plain black, while those of the emperor were red and encrusted with pearls and gems.

[27] Granger-Taylor (1996) 640; Harlow (2004b) 63–66.

[28] *Cod. Theod.* XIV.10.2. Cf. Delmaire (2004) 201–202.

[29] Such oriental trousers, tucked in short boots, can be seen, for example, worn by the deceased in funerary sculptures from Palmyra or by certain of the male figures in

Roman traditions in dress against the encroachment of non-Roman, 'barbaric' fashions and the increasing militarization of male civilian dress in non-military settings, a concern that was also evident in the regulations regarding the civilian attire of senators in Constantinople fifteen years earlier. Roman sartorial traditions articulated what it was to be Roman, as distinct from 'barbarian', in comprehensible visual terms, and were for that reason central both to the self-perception of the state and to the image it wished to project to its own subjects and to foreigners. It is, therefore, significant that these (admittedly belated) attempts to reinforce tradition were associated specifically with Rome and Constantinople, the seats of imperial power, and the 'showcase' of the imperial establishment;[30] and also that they occurred at a time when old boundaries were becoming blurred. However, the change, symptomatic as it was of deeper, far-reaching transformations in the character of late antique society and state, could not be reversed.

As already mentioned, different styles of dress could be used (in real life, as well as in the artistic realm) to bring out different aspects of an individual's personality or social role, as the need arose or as the occasion demanded. Portraits of functionaries in the *chlamys*-costume advertised the portrayed figures' membership of the imperial administration and identified them as men in the service of emperor and state, with all the privileges and duties that this entailed. Thus, Probianus, vicar of the city of Rome, had himself portrayed on one panel of his commemorative ivory diptych, around A.D. 400, under an inscription that, significantly, states his office but not his name[31] (fig. 2, left). In this panel the stress is clearly laid on Probianus as the official of state, not as an individual.

On the second panel of his diptych, however, Probianus apparently wished to make a different statement about himself and draw attention to another, to him, equally important aspect of his personality, namely his rank and his membership of the senatorial order. This he accomplished, not only by having his rank stated after his name in the

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the paintings of the synagogue at Dura-Europos; Pfister (1930) fig. 17; Kraeling (1979) pls. XXXII, LVIII, LXVIII; cf. Widengren (1956).

[30] Similar motives may lie behind the prohibition against wearing leather garments and having very long hair—Gothic practices both (?)—in the western imperial city of Ravenna and its environs, issued by the imperial authorities in A.D. 416; *Cod. Theod.* XIV.10.4.

[31] The name of Probianus appears upside down on the open scroll that he holds across his lap.

inscription above his portrait [*v(ir) c(larissimus)*], but also by having himself portrayed in the traditional garment of his order, the toga (fig. 2, right).[32] Members of the senatorial order, in the East at least, continued to wear the toga down to the late 5th and the early 6th c., as attested by the statues of Pytheas and Palmatus at Aphrodisias in Asia Minor.[33] In the period that concerns us here, that is from the 4th to the 7th c., the toga had become a purely ceremonial garment, no longer worn in everyday contexts. This change in its character is reflected in the late antique manner of draping the toga: it now had folded bands hanging down between the legs and extending across the breast, something that did not really favour energetic movement.[34] Reference has already been made to the edict of A.D. 382, which demanded that members of the senatorial order in Constantinople wore their toga on formal occasions and when participating in judicial hearings.

The insistence of the imperial government on the continual use of this traditional Roman costume, albeit in a ceremonial context, is indicative of the state's desire to maintain the semblance of continuity with the earlier Roman past. The presence of a togate senatorial order in Constantinople in particular may have been perceived as lending further support to the claim of the new capital to the status of New Rome, given that the senate had been one of the most prestigious and most important institutions of the Roman state and its existence and history was inextricably linked with that of the first Rome. In the provinces the late toga continues to appear in statues of governors and vicars of senatorial rank down to the early 6th c., though its use is not exclusive, since certain individuals of this group could be and were represented in the *chlamys* instead. As Smith puts it, the choice of attire for these public monuments in these provincial contexts "would depend on what was thought locally to express the most important and the most impressive aspects of the honorand's role".[35]

Hierarchical distinctions within the senatorial order itself were indicated by varying degrees in the elaboration of the toga and associated garments and accessories. The highest-ranking version of the toga-

[32] For more examples of representations of the same individual in different types of dress for the purpose of highlighting different aspects of his private and public persona, see Baratte (2004) 132, fig. 13.

[33] Smith (1999) 167–68, figs. 8–9, pls. III–IV.

[34] Stone (1994); Smith (1999) 178–81; Harlow (2004b) 49, 51, 54.

[35] Smith (1999) 181.

costume in Late Antiquity was that worn by the consuls when participating in consular processions or when presiding over the games organised to celebrate their consulship (fig. 3). Consular dress comprised a long, long-sleeved purple under-tunic, a sleeveless outer tunic that was slightly shorter than the inner garment, and the *toga picta* (also called *trabea tri-*

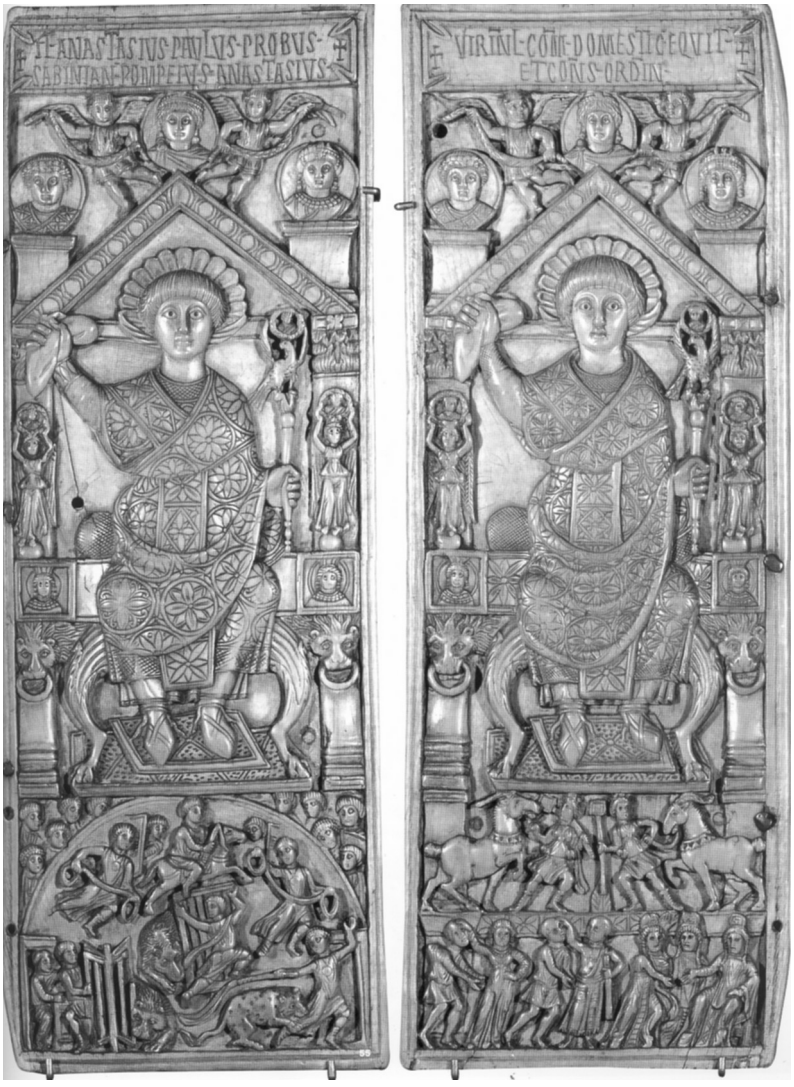

Fig. 3 Paris, Bibliothèque nationale. Ivory diptych of Anastasius, consul in Constantinople in A.D. 517. (Photo Bibliothèque nationale de France, Paris)

umphalis), a magnificent purple toga, heavy with gold embroidery, that was folded and draped around the torso in a way that must have made movement difficult. On their feet, the consuls, just like the senators, wore the *calcei*, shoes that encased the foot and ankle completely. After being wrapped around the ankles several times, they were secured with pairs of leather straps tied in a knot. Consular attire was complemented by a sceptre surmounted by an eagle. On consular ivory diptychs consuls are depicted holding a handkerchief in their raised right hand: this was the *mappa*—also an item of traditional senatorial attire—which the consuls used to signal the beginning of the games. The consular costume was also worn by the emperor, either upon his assumption of the consulship or when he celebrated a triumph. Imperial consular dress was distinguished from that of non-imperial consuls by the use of precious stones, in addition to gold embroidery, for the adornment of the *trabea triumphalis*.[36] One might argue that the luxurious appearance of consular attire agreed well with the outfit's triumphal connotations, since it contributed to the glorification of the bearer with its preciousness and brilliance.[37]

In the male-dominated arena of active politics and imperial administration women had a very limited role to play. This state of affairs appears to be reflected also in the comparative lack of information concerning the dress of the empress, or that of the women in her entourage, as well as the ceremonial apparel of the wives of state officials in Late Antiquity. That there did exist some kind of court etiquette for women is suggested by the episode recounted in the life of St. Melania the Younger (A.D. 383–439), a member of the Roman aristocracy, who against accepted practice for women of her rank, appeared in an audience with Serena, wife of Stilicho the *magister militum* and effective ruler of the West, with her head covered with a veil.[38] By going veiled the saint was expressing her acknowledgment of and obedience to an authority that was higher than any temporal power. St. Melania's religious zeal was so strong as to lead her to disregard established social conventions concerning the attire of women of her status when appearing in the palace at Rome and to brave whatever criticism such behaviour might

[36] Delbrueck (1929) 43–44, 52–54, 59–63, 65–66; Goldman (1994) 116–22.

[37] By the 6th c., the imperial *trabea* had developed into a much narrower bejewelled scarf, the so-called *loros*, which, during the Middle and Late Byzantine periods, became the vestment of imperial majesty *par excellence*. See Parani (2003) 18–24.

[38] Clark (1984) 34. Cf. Harlow (2004a) 214.

provoke. It is unfortunate that there are not more descriptions similar to this one that would help us to reconstruct the attire of women at court and to unravel its layers of meaning. It is, nevertheless, possible to make certain general observations based on surviving portraits.

The official attire of the empress was modelled after that of her imperial spouse (fig. 4).[39] She, too, wore the all-purple *chlamys* and bejewelled imperial brooch, complemented by the female version of the imperial crown, with pointed projections along the upper rim and longer *prependoulia*. The whole was accompanied by elaborate jewellery, and red shoes that covered the feet completely. The fact that the empress was allowed to wear the *chlamys* (a cloak, as we have seen, with military associations, which, under normal circumstances, had no place in the female wardrobe) was indicative of the empress's special status vis-à-vis the other members of her sex. At the same time, it pointed towards the source of her elevated position, which was the emperor.[40] The singular attire of the empress becomes even more striking when one remembers the severity with which 'cross-dressing' was frowned upon in late antique society.[41] Thus, it is not surprising to find that, by contrast to the empress, wives of *chlamys*-clad officials like Projecta (portrayed next to her husband Secundus on the famous 4th c. silver casket from the Esquiline Treasure),[42] did not wear the *chlamys*. They wore the female garments and jewellery that were fashionable at the time and to which we shall be returning shortly.

Despite the lack of information noted above, our pictorial sources suggest that a type of high-ranking female attire existed that can be described as 'ceremonial' and which was apparently worn by the wives of members of the senatorial class, as well as by the female members of the imperial family. This outfit may be regarded as the female counterpart of the late antique male toga.[43] Its distinctive element was a gold-embroidered mantle, the *palla*, which was elaborately draped around the body. The *palla* can be seen, for example, in the fine marble statue of an Early Byzantine empress identified with either Aelia Flacilla or Pulcheria and dated to the late 4th or early 5th c.[44] In portrayals of married couples on late antique gilded glass, dated usually to the late

[39] See also Delbrueck (1929) nos. 51–52.
[40] Cf. Croom (2000) 90.
[41] Cf. Delmaire (2003) 88; Baratte (2004) 131–32; Harlow (2004b) 47–48.
[42] Shelton (1981) no. 1, pls. 4, 8, 10–11.
[43] Cf. Delbrueck (1929) 54–58.
[44] Durand *et al.* (1992) no. 4.

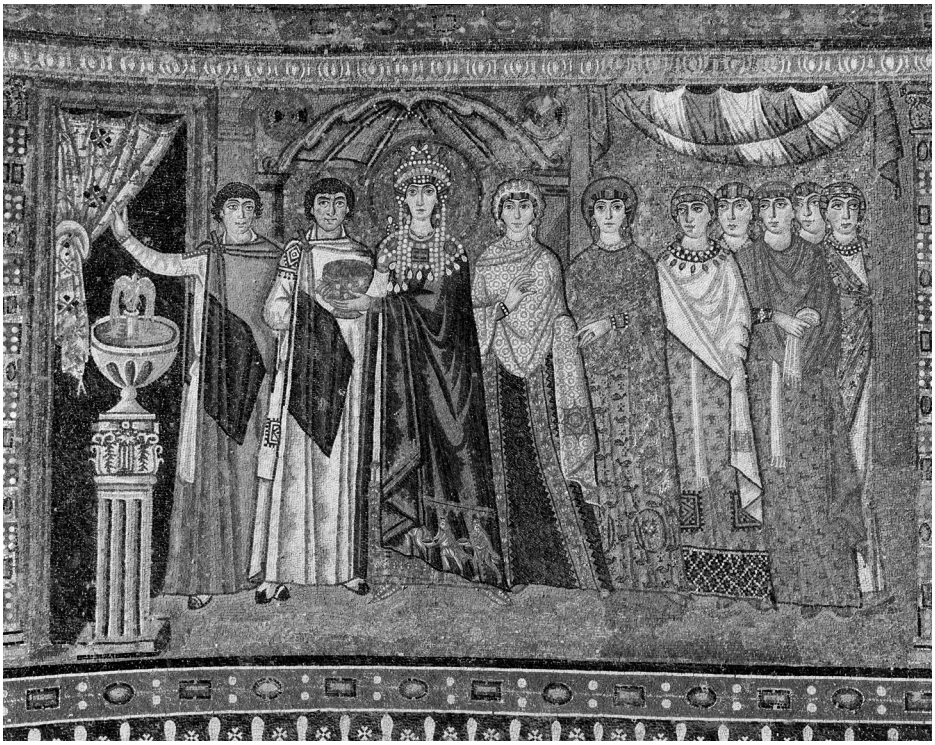

Fig. 4 Ravenna, San Vitale (*ca.* A.D. 547). Theodora, ladies of the court and officials. (© 1990, Photo Scala, Florence)

3rd or the 4th c., the wife appears next to her togate husband, dressed in a tunic and the gold-embroidered mantle, mirroring his rank and social position in her dress.[45] Apparently, the golden *palla* was still worn at the beginning of the 6th c.: the princess Anicia Juliana, wife of Areobindus, consul in the East in A.D. 506, is portrayed wearing the *palla* in the *Vienna Dioscurides*, a manuscript which was presented to her as a gift and which is dated to shortly after A.D. 512/3.[46] The use of this elaborate garment seems to have been connected to the fortunes of the toga and, like the male garment, appears to have become obsolete by the middle of the 6th c.[47]

[45] See, for instance, Morey (1959) figs. 9, 39, 91–93, 316; Weitzmann (1979) no. 261.
[46] Lowden (1997) fig. 54.
[47] Only the empress continued to wear a bejeweled version of it, the female equivalent of the emperor's *trabea*, which in time developed into the mediaeval Byzantine female *loros*. See Parani (2003) 25–27.

What now of the situation 'beyond the pale' of the court? Our sources allow us tantalising glimpses of the diversity of dress that existed in the lands of the late antique empire, where men and women of all ages, rich and poor, lay and ecclesiastic, Roman and foreign, went about their daily activities in their characteristic attire. Those who could afford it, owned at least two sets of clothes, one for their everyday needs and one reserved for special occasions, such as going to church on major festivals or attending a wedding feast. In the Miracles of St. Artemios, there is the story of a cantor who was particularly devoted to St. John the Forerunner but chose not to attend the procession commemorating the saint's birthday, because his fine clothes had been stolen from his home the night before. Though he still had his daily clothes, he considered himself naked and would not take part in the festivities inappropriately dressed.[48] Those who could not afford to have a set of fine clothes could, of course, borrow one when the occasion arose, but had to return it unsoiled. If the borrower damaged the garments in any way he or she was accountable to the law.[49]

As frequently attested by surviving portraits and the rich finds of garments recovered mainly from Egyptian and Middle Eastern sites, the basic garment for both the sexes was an ample tunic, woven to shape in one piece and then sewn down the sides (fig. 5).[50] Such tunics were usually made of linen or wool, with silk reserved for high-status individuals who could afford it.[51] Representations of clothing made of colourful patterned textiles, which become relatively common in 5th and 6th c. artistic contexts, are usually taken to represent silk garments.[52] On the other hand, the decoration of linen and woollen tunics was as a rule 'confined' to tapestry ornamental elements (*segmenta*), which included *clavi*, i.e., stripes running from the shoulders to the hem, shoulder-bands that stopped above the waist, neck-bands, pairs of roundels or square panels at the shoulders and the skirt, angled bands at the hem, and galloons at the cuffs. These decorative elements were commonly woven using dyed wool yarns. The highly ornamental effect was accomplished by the contrasting colour or colours of the various bands and panels, which made them stand out from the main body of the tunic, as well

[48] Crisafulli and Nesbitt (1997) 114–20.
[49] Maguire, Maguire and Duncan-Flowers (1989) 139.
[50] Cf. Granger-Taylor (1982).
[51] Cf. Granger-Taylor (1983).
[52] Harlow (2004a) 210.

Fig. 5 New York, The Metropolitan Museum of Art, acc. no. 26.9.8. Linen tunic with tapestry-woven decorative elements in purple black wool from Egypt (4th c. A.D.). (All rights reserved, The Metropolitan Museum of Art)

as by their decoration proper. In terms of its subject-matter, this decoration included geometric and vegetal motifs, animals, human figures, and even narrative scenes with a biblical content.[53] Biblical iconography on lay garments served not only as an expression of personal piety and a public declaration of faith at a time when the Church was no longer under persecution, but also, according to H. Maguire,

[53] The bibliography on archaeological late antique textiles in general and garments in particular is quite extensive; see, for example, Pfister and Bellinger (1945); Pfister (1951); Fabre (1973); Gervers (1983); Lafontaine-Dosogne (1988); Rutschowscaya (1990); Martiniani-Reber (1991); Stauffer (1991); Stauffer (1992); Roussin (1994); Stauffer (1995); Cardon and Feugère (2000); Fluck *et al.* (2000); Schmidt-Colinet, Stauffer and al-As'ad (2000); Lorquin (2003).

as a shield against evil. It is possible that a number of other motifs occurring on garments also had an apotropaic function.[54] One might say that garments bearing such decoration were meant to protect the bearer not only physically—against the elements—but also spiritually—against daemons—both inside the house and out.

Artistic representations on different media, comprising portraits as well as scenes inspired by everyday life, suggest that the tunic with the ornamental panels, which archaeologically is attested mainly in the East, was worn all over the late antique empire. At present, it is not possible to determine the extent to which this uniformity in the depiction of dress reflects reality, rather than, for example, the widespread use of a shared pictorial vocabulary by artists working in different parts of the empire. In either case, the tunic with the panels appears to have been regarded as the appropriate garment for the depiction of the late antique inhabitants of the empire, as opposed to northern and eastern 'barbarians', indicating that it must have been considered emblematic of certain shared cultural values or a notional identity that distinguished the 'Roman' from the other. Given the nature of the existing evidence, regional differentiation in dress is at present difficult to trace, and its meanings difficult to decipher, though painstaking analyses of archaeological evidence, especially relating to jewellery and other dress accessories, suggest that it did exist.[55]

Depictions in art intimate that the tunic with the tapestry decorative elements was worn by members of all social strata (fig. 6). It is in the number of such elements, their size, elaboration, and, of course, in the kind of the yarns used that the social and economic status of the bearer was mirrored.[56] Diocletian's price edict of A.D. 301 amply illustrates the fact that garments of different qualities and prices were available in the market, in order to satisfy the needs of a public whose purchasing power varied widely, but who shared a common desire to enjoy the latest fashions, to the degree that its means permitted.[57] There does not seem to be a particular item of dress that was particular to the members of the middle classes or the poor, as the *chlamys* was for the

[54] Maguire (1990).
[55] Swift (2000); Swift (2004).
[56] Cf. Harlow (2004b) 59.
[57] Gervers (1983) 288–89, 297, tables 16.1–4; Morelli (2004). For evidence for the existence of manufacturers of fabrics and garments of various qualities in the 5th–7th c. A.D., see, for example, Patlagean (1977) 165.

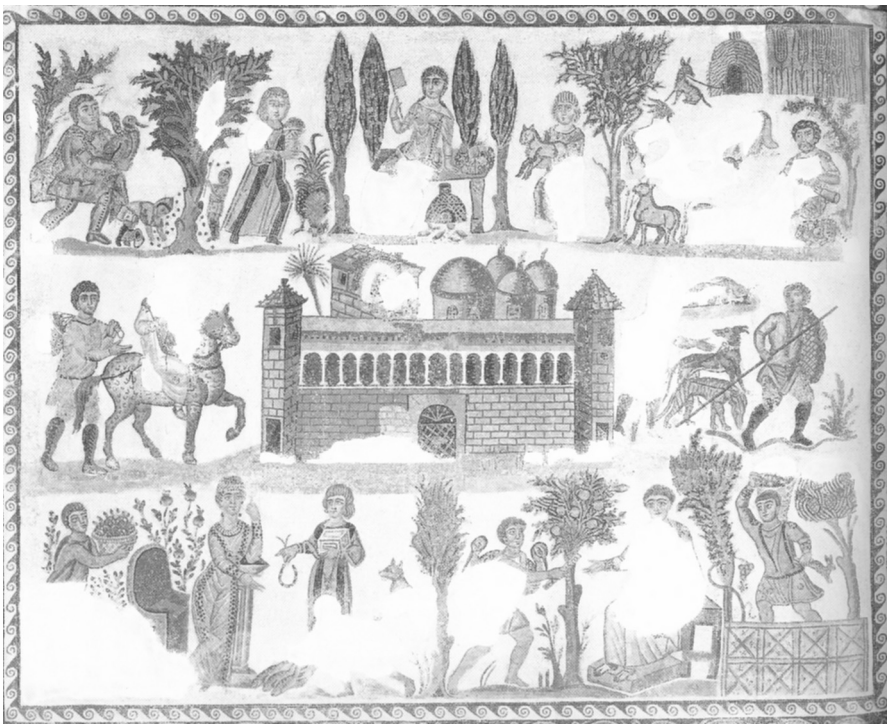

Fig. 6 Tunis, Bardo Museum, floor mosaic from Carthage. The estate of Lord Julius (late 4th–early 5th c. A.D.). (Courtesy of the Deutsches Archäologisches Institut-Rom [Inst. neg. no. 61.532]. Photograph by Koppermann)

functionary or the toga for the senator. What distinguished the dress of the affluent from that of the indigent was the material, the quality, and the consequent cost of the garments. In addition, the members of the first group were able to own more than one garment, while the poor often only had one, and that worn constantly until it became threadbare.[58] Thus, plain clothing made of cheap rough materials, often acquired second-hand, came, for economic reasons, to be associated with the poor, since this is all they could afford. In some cases, however, the adoption of such cheap and plain garments was intentional. A number of Christian members of the upper and middle classes, in search of spiritual salvation, negated their status and rejected its outward signifiers in favour of the ascetic ideal and its external marker: the plain, coarse

[58] Cf. Patlagean (1977) 54.

garments that in the minds of all were equated with low status and poverty.[59] At the other end of the scale were those who, having come by funds, legally or illegally, would acquire raiment 'too pretentious for their individual rank', causing the censure of their more conservative contemporaries.[60] In fact, there was nothing to stop a prostitute from acquiring the same type of garments (or even the actual clothes themselves, if they were on sale) worn by an upper class woman, if she had the financial ability to do so.[61]

Nor does there seem to have existed in Late Antiquity a particular style of dress that would have distinguished the child from the adult. The late reference to the Roman *toga praetexta* in Justinian's *Digest* as part of the attire of young boys should, in my view, be disregarded as antiquated, not reflecting current practice.[62] Both artistic representations and finds of children's tunics in archaeological contexts indicate that the garments of children were similar in appearance and decoration to those of adults, with the only difference being that children's tunics were often provided with a hood.[63] This is not to say that young males could not assert their individuality or claim a group identity through dress, if they so wished, as certain members of the circus factions seem to have done in 6th c. Constantinople by adopting extravagant fashions and foreign hairstyles.[64] However, non-conformism and challenging the conventional order through dress was not an exclusive privilege of the hot-headed young: St. Symeon the Fool apparently shocked the citizens of Emesa when one day he decided to take his tunic off, wrap it around his head as a turban, and go about naked, freed by his sanctity from the constraints of traditional morality.[65]

The tunics worn by the majority of lay men (who, unlike St. Symeon, complied with the social convention of wearing clothes) were, as a rule, long-sleeved, and came down to the knees, though longer tunics reach-

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[59] Cf. Clark (1993) 112–16.

[60] See, for example, Procop., *Anecdota* VII.11–14.

[61] The reference is to an episode described by John of Ephesus, concerning a wealthy woman called Sosiana, who donated her expensive clothing to a church to be used as ecclesiastical furnishings, rather than having them liquated from fear that a prostitute might acquire them, Joh. Eph., *V. SS. Or.* (ed. and transl. Brooks (1925) no. 55 (esp. p. 195)).

[62] *Dig.* XXXIV.2.23.2. Cf. Croom (2000) 119.

[63] See, for example, Stauffer (1995) 27, no. 37; Durand and Saragoza (2002) nos. 77–78; Delbrueck (1929) no. 63.

[64] Procop., *Anecdota* VII.11–14. For a commentary, see Cameron (1976) 76–77; Baratte (2004) 130.

[65] Leont. N., *v. Sym.* (ed. and transl. Festugière (1974) 82–83).

ing down mid-calf are also attested in the artistic record and may have been a marker of elevated status. The tunics were worn either girt or without a belt. In some 4th c. artistic contexts, lords and attendants wear a similar type of belt, probably made of red leather or fabric and secured at the side by means of straps.[66] Belts with buckles are attested by the late 4th c., when they were used in association both with the tunic and with the tight trousers or leggings worn beneath it. Numerous finds of buckles from different sites within the lands of the empire dating to the 6th and 7th c., attest to the fact that, by that time, the belt with the buckle had become one of the standard accessories of late antique male attire.[67] Buckles made of gold and silver would have been employed by the rich, while those made of bronze would have formed part of the dress of the less affluent. However, on certain occasions it was deemed undesirable and frankly unwise to advertise one's wealth by flaunting valuable accoutrements. Thus, Procopius informs us, in 6th c. Constantinople, some of the wealthy opted for the less pretentious bronze buckles when they had to go out at night so as not to attract the attention of thieves, who would not hesitate to kill them in order to relieve them of their fine clothes and precious accessories.[68]

The superposition of layers of clothing was in itself an indicator of elevated status. The presence of an inner tunic beneath the outer tunic, however, is difficult to establish based on artistic representations alone. However, references to male under-tunics in late antique sources attest to their usage. Apparently, the quality of the under-tunic, like the rest of the clothing, would vary according to the status and means of the owner. In the 7th c. Life of St. John the Almsgiver by Leontis of Neapolis is recounted how a wealthy tax-collector from Alexandria gave his under-tunic (σωφόριν) to a naked sailor, who had just survived a shipwreck. Strangely enough, the sailor felt embarrassed to wear the under-tunic and gave it to a tailor to sell.[69] One cannot help but wonder at the cause of his embarrassment. Was it the act of generosity itself, the profession of his benefactor, or did the sailor consider

[66] See, for example, Papanikola-Bakirtze (2002) 532–33 (4th-c. fresco in the so-called tomb of Eustorgios, Thessaloniki).

[67] Russell (1982) 137–46. For earlier material, dating to the 4th and 5th c., see Swift (2000) 185–204.

[68] Procop., *Anecdota* 7.15–18.

[69] Leont. N., *v. Jo. Eleem.* (ed. and transl. Festugière (1974) 369). Note that in the account of the same episode found in the epitome of the biography of St. John by Sophronius, it is specified that the donated garment was a precious one and it was because of this that the sailor felt embarrassed to wear it; see Delehaye (1927) 47.

the garment inappropriate in some way, being perhaps too fine, for a man of his station?

As for trousers and leggings, reference has already been made to them as part of late antique male dress, worn from the emperor down to some of his humbler subjects. In addition to the long trousers, in certain artistic representations—mostly from the eastern part of the empire—one also encounters short breeches, associated with hunters, *venatores*, and other male figures of middle or low social status. In these contexts the short breeches serve as a distinguishing feature of men with a physically active lifestyle.[70] The public role of men and their participation in different spheres of outdoors activity also necessitated the use of different kinds of footwear suitable in each case.[71] Sandals were still employed in the 4th c., though they were gradually being supplanted by other types, like the *kampagia*, which were worn by private individuals as well as officials, and low boots that covered the whole foot and the ankle. Hunters and horsemen wore tall leather boots or puttees for protection.[72]

Outside the privacy of the home, men would wear a mantle, which, as we have seen at the very beginning of this survey, was considered a necessary complement of male attire for appearances in public, be it in the street or the church. Wearing mantles with hoods (*byrris aut cucullis*) was also permitted to slaves residing in Constantinople, as long as their masters were not in imperial service.[73] Why this distinction was made is unclear. Perhaps, the slaves of imperial officials were supposed to wear a different type of mantle that would identify them as such, but this is not specified in the relevant regulation. The interest of the imperial government in defining the dress of slaves (the only social category other than senators and functionaries, to receive such treatment) is, in any case, worth highlighting.[74]

One type of late antique male cloak was similar to the *chlamys* and was worn fastened at the shoulder. In representations, this type of cloak, which usually reaches down to the knees or mid-calf, is associ-

[70] See, for example, Kondoleon (2000) 66 fig. 2; Jobst *et al.* (1997) fig. 50; Piccirillo (1993) figs. 37, 511.
[71] Kalamara (1995) 52–54.
[72] See, for instance, Dimitrov (1962) figs. 5–6, 8–9; Carandini, Ricci and de Vos (1982) figs. 12, 15, 91, 93; Piccirillo (1993) fig. 510; Blanchard-Lemée *et al.* (1996) figs. 129–130, 134; Ben Abed-Ben Khader (2003) fig. 364. See also Croom (2000) 56, 62.
[73] *Cod. Theod.* XIV.10.1.2 (A.D. 382).
[74] Cf. Patlagean (1977) 54.

ated with hunters, body-guards, and other figures with possible military associations.[75] John Lydus in the 6th c. informs us that 'private *chlamydes*' were sometimes adorned with tapestry ornamental elements (σημέντα), which, nevertheless, must have been different in appearance from the *tablia* of the state-official cloak.[76] The most common type of civilian male mantle, however, was a conical sleeveless cape, which was pulled on over the head and was often provided with a hood. Judging by artistic representations, the *birrus* or *paenula*, as this mantle was called, could be either short, covering just the upper part of the torso, or long, reaching down to the ankles.[77] The short version with the hood is often associated with the depiction of men engaged in rural activities or the hunt (fig. 6, upper left corner).[78] Sleeved coats are also attested in some rare artistic contexts, with the sleeves depicted hanging empty at the sides.[79] Unknown in Graeco-Roman tradition, such coats formed part of the attire of the empire's eastern and northern neighbours. There is, therefore, always the possibility that sleeved coats were introduced into late antique artistic contexts as attributes of foreigners active or living within the lands of the empire and did not necessarily form part of 'Roman' dress at the time.[80]

In comparison to men, women in Late Antiquity appear covered up in garments restrictive of movement, a reflection no less of their more sheltered and less physically active lifestyle than of contemporary ideas, increasingly influenced by Christian morality, on the proprieties of female conduct whether in private or in public. The ample tunic that was characteristic of the female wardrobe, the so-called 'dalmatic', reached down to the ankles and had very broad sleeves (fig. 6).[81] In artistic representations dalmatics worn by female servants appear to be

[75] See, for example, Balty (1977) figs. 47–48; Carandini, Ricci and de Vos (1982) figs. 15, 17, 127; Piccirillo (1993) fig. 166; Kondoleon (2000) 66 fig. 2; Blanchard-Lemée *et al.* (1996) fig. 134. I am grateful to Dr. A. W. H. Evers for the latter reference.

[76] Lydus *Mag.* (ed. and transl. Bandy (1983) 88).

[77] Rinaldi (1964–65) 257–60; Croom (2000) 53–54. For artistic representations, see, for example, Casalone (1962) figs. 5–6; Crippa and Zibawi (1998) figs. 252–53, pl. 83.

[78] See also Baratte (2004) 132, fig. 12.

[79] Åkerström-Hougen (1974) 43–44, pls. 4.2, 5.1.

[80] Coats with the sleeves hanging empty at the sides are shown worn by the right group of 'barbarians' on the NW side of the pedestal of the obelisk of Theodosius I in the hippodrome of Constantinople (*ca.* A.D. 390); Grabar (1936) pl. XII.2.

[81] For an extant example from Egypt, see Walker and Bierbrier (1997) no. 227. Dalmatics were also worn by men and survived into the mediaeval period as an item of ecclesiastical dress, see Granger-Taylor (1983) esp. 139–41.

slightly shorter, reaching to just above the ankle, probably to facilitate movement.[82] Female tunics, regardless of the social rank of the bearer, were commonly adorned with *clavi* and decorative bands at the sleeves. The other types of tapestry ornaments that adorned male late antique tunics, namely the round and square panels, the shoulder bands, and the angled band at the hem, also occur on female tunics, but with less frequency, it would seem, than on their male counterparts.[83] The tunic could be worn with or without a belt. The belt, when used, encircled the body beneath the breasts. It helped shape the garment, while revealing at the same time something of the human form beneath it. In the case of female servants and other women involved in physical activities, the belt also served the practical purpose of gathering the broad, cumbersome sleeves at the sides, thus leaving the arms unhampered.[84] As a rule, the dalmatic was worn over an inner tunic. The long, narrow sleeves of the under-tunic are often visible in representations where the outer tunic is depicted girt, with its sleeves gathered in.[85] Some pious women with ascetic tendencies, but whose social environment did not permit them to follow their calling freely, like St. Melania the Younger, would wear inner tunics made of coarse wool under their expensive silken outer garments as a form of voluntary self-abasement, but these were exceptional cases.[86] Over their tunics the women wore a mantle. The most widespread type of late antique female mantle consisted of a rectangular piece of supple fabric that was draped around the upper part of the body (fig. 4).[87] A second type of mantle, worn by some 6th c. female donors portrayed in church floor mosaics at Jerash, was similar to a cape and was fastened at the front, over the breast, by means of two straps going through an oval or circular brooch.[88] It has been suggested that the fact that women led a far less active lifestyle out-of-doors is also reflected in the more limited range of footwear worn by them, compared to men, who needed many different types of shoes

[82] Harlow (2004a) 207.
[83] For artistic representations, see, for example, Rutschowscaya (1990) 51; Piccirillo (1993) figs. 509, 515.
[84] See, for instance, Dimitrov (1962) fig. 4; Carandini, Ricci and de Vos (1982) fig. 200; Blanchard-Lemée *et al.* (1996) fig. 116. Cf. Croom (2000) 82; Harlow (2004a) 207.
[85] The combination of inner and outer tunic in female dress is also attested archaeologically; see Fluck *et al.* (2000) 176, nos. 111, 113.
[86] Clark (1984) 29.
[87] Cf. Harlow (2004a) 212.
[88] Piccirillo (1993) figs. 509, 515.

appropriate to different kinds of physical activity. The commonest type of late antique female shoe was a closed-shaped one, which covered the foot completely, from toes to ankle.[89]

As for the hair, this would be gathered up on top of the head or at the nape, according to the dictates of contemporary fashion, and held in place with a fillet, a diadem, a hairnet, or a snood. A kerchief or veil, flowing down the shoulders, was sometimes placed over the hairnet or snood. Alternatively, the head could be covered by a fold of the draped mantle.[90] However, the veiling of women does not seem to have been obligatory, though Church Fathers, like St. John Chrysostom, advocated the covering of a woman's head with some kind of head-dress, particularly when appearing in public and when going to church, not only to protect her modesty but as a sign of obedience.[91] They also advised women to abstain from adorning themselves with expensive jewellery. Judging by the archaeological evidence and that of surviving portraits, their advice regarding jewellery was not heeded.[92]

It is reasonable to assume that feminine garments and hairstyles varied according to a woman's family status. Yet, whatever differences existed between the attire of an unmarried girl and that of a married woman still remain to be defined, as do the basic components of late antique bridal dress.[93] At present, the only category we can safely identify by its distinctive attire comprises women in mourning, especially, widows. These women were distinguished by their plain, sombre-coloured garments, which were probably made of naturally dark woollen yarns. If we are to judge by surviving representations, the design of their clothes was the same as that of their more fortunate contemporaries; it is the lack of colour and ornament that alluded to their bereavement.[94]

To complete this general survey of secular dress as a polyvalent signifier of identity in late antique society, we will now look briefly at the dress of certain groups defined by profession, rather than by gender

[89] Kalamara (1995) 53–55.

[90] Emmanuel (1993–94) 113–14, 117; Croom (2000) 101–105; Harlow (2004a) 213–14. For extant head-kerchiefs and snoods from Egypt, see, for example, Fluck *et al.* (2000) 21–22, nos. 33–35, 101, 122, 142–44.

[91] Joh. Chrys., *Hom. in Ep. I ad Cor.*, *PG* LXI. 216.

[92] Maguire, Maguire and Duncan-Flowers (1989) 159; Yeroulanou (1999); Baldini Lippolis (1999).

[93] Parani (2000) 187–98.

[94] See, for example, Brenk (1977) pl. 67; Fiocchi Nicolai, Bisconti and Mazzoleni (1998) fig. 121.

and rank as has been the case so far. Beyond any practical advantages it offered the bearer in the execution of his or her tasks, professional attire marked a person out as a member of a group in shared possession of specific skills. It raised expectations as to his or her ability to comply to the patterns of behaviour associated with his or her profession and to respond to the demands placed upon his or her expertise by others. However, by publicising membership of a specific professional group, such attire could, at the same time, expose the bearer to criticism and suspicion stemming from contemporary society's prejudices and preconceptions concerning certain professions and their practitioners. Admittedly, our sources are not particularly informative concerning the dress characteristic of different professional groups, with the notable exception of military attire, which will nevertheless not concern us here. Otherwise, sufficient evidence, mostly in the form of artistic representations, exists only for the attire of the men and women engaged in the public-spectacle business, i.e., the *venatores*, charioteers, musicians, actors, and actresses.[95]

The attire of the *venatores* usually comprised a short tunic, which could be tacked in at the waist for greater freedom of movement, or a waist-length shirt worn over a pair of breeches or a loincloth. On top of the tunic or shirt, they could wear some kind of leather jerkin for additional protection. Finally, their dress was complemented by sturdy footwear—usually tall, leather boots—and, quite often, protective kneecaps and puttees. The *venatores* in the famous mosaic of the Great Palace in Constantinople have their jerkin adorned with coloured panels, indicating the circus faction to which they belonged, Blue, Green, Red, or White. Others, like the animal-fighters depicted on a floor mosaic from the House of the Ostriches at Sousse (North Africa), opted for more spectacular, individualised costumes, incorporating animal hides or fearsome lion-heads, that advertised their fierceness and were intended to impress the spectators that crowded the arenas.[96] However, even when the *venatores* were dressed in costumes aimed to create and project an awe-inspiring stage persona, they were still conforming to the rules that governed the spectacle world, catering to contemporary tastes for extravagant theatricality and visually stunning displays.[97]

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[95] Cf. Kalamara (1995) 121–23.

[96] For example, Jobst *et al.* (1997) figs. 21–22; Blanchard-Lemée *et al.* (1996) figs. 153, 162; Ben Abed-Ben Khader (2003) figs. 76, 230–31.

[97] Cf. MacMullen (1964) esp. 445–54.

Judging by artistic representations on different media, charioteers wore a short under-tunic with long sleeves and a sleeveless outer tunic or shirt, which, in certain examples, seem to be reinforced with some sort of padding. Around their trunk, they wore a kind of leather corselet laced at the front, which prevented their garments from flapping in the wind and, at the same time, shielded the torso against the friction of the chariot's reins that went round the waist. Their outfit was completed by tight trousers, additional protection for the legs, boots, gloves, and a helmet. One assumes that they must have carried a sharp knife or dagger as well, to cut themselves free of the reins in case of an accident.[98] The attire of charioteers, like that of the *venatores*, was designed to allow them freedom of movement while offering them some degree of protection. However, it also had to proclaim in no uncertain terms the faction to which each of them belonged. Thus, they sported the colours of their demes on their tunics and helmets, as well as on their horses' trappings, so that they could be clearly visible even at a distance. Creating an individual persona by means of dress was not an issue in their case as it was sometimes with the *venatores*; what was important was to apply whatever personal talents they had to winning the race for their team and its supporters and—literally—to bringing glory to their colours.

While the dress of the female musicians in the 4th c. mosaic from Meriamin, Syria, does not differ in any significant way from that worn by women off the stage,[99] performers, in general, did wear costumes according to the demands of their profession. Acrobats could be scantily dressed and perform their routine in nothing more than a loincloth, though appearing entirely naked seems to have been forbidden as a small concession to modesty. As for actors and actresses, they would appropriate the garments of those they wished to impersonate or ridicule, in association with an array of props, like artificial humps or wigs (fig. 3, lower register). Full body-suits for actors representing satyrs are also attested in the artistic record.[100] An edict of A.D. 394, however, forbade actresses of mimes and 'other women who acquire gain from the wantonness of their bodies' to wear in public 'the dress of those

[98] See, for example, Brenk (1977) pl. 110a–b; Weitzmann (1979) nos. 93–96; Carandini, Ricci and de Vos (1982) figs. 202–203, fol. XLI.86; Ben Abed-Ben Khader (2003) figs. 78, 151, 219.

[99] Balty (1977) 94–99, figs. 42–44.

[100] Roueché (2002); Malineau (2003).

virgins who are dedicated to God', i.e., nuns, perhaps in an attempt to protect the monastic habit, and what it stood for, from mockery and the 'degradation' of being associated with women of 'loose morals'.[101]

Similar prejudices against female performers could perhaps be detected behind a decree of A.D. 393 that forbade them to wear garments made of figured silks and textiles adorned with gold, as well as any garment even partly dyed with murex purple. They were also forbidden the use of jewellery encrusted with precious stones, though they were allowed to wear plain gold ornaments.[102] It is unclear whether this decree refers to the attire of actresses off or on the stage. Still, it could be taken to reflect the imperial government's concern to safeguard its dignity by prohibiting any association between some of the more obvious markers of imperial status (such as true purple, and precious stones) and women of ill repute as actresses were considered to be.[103] In any case, this decree constitutes an interesting testimony to the fact that popular female performers in Constantinople, and possibly in other great cities of the empire as well, could become wealthy on generous fees and expensive gifts from admirers and display their success by means of luxurious and eye-catching clothing and accessories. In this way, they apparently provoked the state's intervention, to curb what was perhaps regarded as an appropriation of attire unsuitable to women of their low status, and as a flaunting of morally suspect wealth.[104]

Conclusion

Late antique society was a society in transformation, in the process of reinventing itself under the pressure of changing historical conditions. Roman traditional political, social, religious and moral values were brought into question by ascendant Christianity on the one hand and the rise into prominence of 'barbarians' in the military and state bureaucracy on the other and had to be either adapted to the new realities or abandoned altogether. In such a climate of flux different social groups, and the individuals within them, needed to carve out their own

[101] *Cod. Theod.* 15.7.12.1 = *Cod. Iust.* 1.4.4. On female performers in Late Antiquity and their social status, see Webb (2002).
[102] *Cod. Theod.* 15.7.11. Cf. Malineau (2003) 167–68.
[103] Cf. Delmaire (2004) 200.
[104] Cf. Webb (2002) 294.

space and define their identity with clear, yet permeable boundaries, which would distinguish them from others without isolating them. Late antique dress functioned as one such boundary. In a culture conscious of and sensitive to the communicative power of the visual, it is not surprising to discover that groups and individuals tried to construct an identity for themselves and articulate their self-perception in their choice of dress and accessories, nor that status and rank were aptly and eloquently conveyed by means of materials, designs, colours and ornamentation. The complexities of late antique society are mirrored in the multiplicity of clothing that this survey has tried to highlight and in the varying attitudes of groups and individuals towards dress and personal adornment. Its tensions are reflected in the survival of old designs side-by-side with the new and in the efforts of various authorities, secular and religious, to set down rules regarding the proper attire of different social categories. True, certain of the basic aspects and many of the finer meanings of late antique dress still elude us and, perhaps, may never be fully reconstructed because of the nature of the existing evidence. Still, what has survived amply demonstrates the central role of dress in a demanding system of social interaction in which everyone had to be dressed for the part he or she had or chose to play.

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THE IMPOSSIBLE ART OF DRESSING TO PLEASE: JEROME AND THE RHETORIC OF DRESS*

Mary Harlow

Abstract

This paper uses the letters of Jerome as a case study for examining the rhetoric of dress in early Christian writing, and considers how far such a language of dress can be useful in creating a catalogue or chronology of female dress in Late Antiquity. The paper will argue that discourses about dress and gender in the western empire show striking continuity over time and across the boundary between classical and Christian literature.

Introduction

Jerome was one of the most intriguing churchmen of his age. He wrote in a particular social, religious and temporal context—that of the Late Roman Christian ascetic world. Moreover, the majority of his writings, particularly the letters central to this paper, were written when he lived in the relative seclusion of the Holy Land, far from the society he purports to describe. Jerome, like other early Christian writers before him, used common and repetitive literary *topoi*, which were fundamental tools in the early Christian discourse on the place and role of women in the world. For writers of the ascetic movement women were damned by their link to Eve and original sin; in themselves as women; and as a sex as a danger to men. The stereotypes that are played out in these writings were common currency in the ancient and late antique world. Women were viewed as all that men were not. By the very nature of their sex they were held to be inferior. Where men were rational, women were irrational and subject to their emotions; where men were

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capable of self-control, women needed to be controlled. Like children, they needed protection and guidance. Classical authors attributed this to a number of causes, the most fundamental of which was the idea that the female sex was an unfinished and incomplete version of the male.[1] Christian writers absorbed this idea and superimposed upon it the story of the Fall, wherein Eve was held responsible for Original Sin and the coming of death into the world.[2] The teachings of Paul and Peter further confirmed the subordinate place of women in the social hierarchy of Christian society.[3]

For writers like Jerome the ideal life was that of the ascetic. This was a life of self-denial, and thus all worldly and material things should be set aside for a celibate life of prayer and good works. The more an individual denied his or her human needs for sex, food and comfort, the closer he or she came to God. For women this was doubly hard because of their perceived natural state as emotional, weak and wilful, and more tied to the physical realm than men. Jerome, writing with a sense of all these traditions behind him, uses his constant references to female dress to highlight the failings of women as a sex. This is not to suggest that all writers at all times took all women to be inferior. I am dealing here with a rhetoric of gender, not a social reality.

Jerome's Advice for Women on Dress and Appearance

In A.D. 414 Jerome wrote a letter to Demetrias, a young aristocratic woman who, on the eve of her wedding, decided to reject marriage and instead to dedicate her life to holy virginity. Jerome's letter appears to have been commissioned by Demetrias's mother, Anicia Juliana, who on her daughter's eleventh-hour conversion consulted some of the highest placed churchmen of the period for advice on how her daughter should now conduct her life. Jerome, Augustine, Pelagius, and a fourth, unidentified writer, all wrote in response.[4]

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[1] This is evident in a number of philosophical and medical writings, e.g., Arist. *De motu an.* 728a, 737; Gal. *De usu partium* 14.6. See also Dean-Jones (1994a); Dean-Jones (1994b).

[2] Genesis 1–3. See also Pagels (1988); Rouselle (1988).

[3] For recent literature on women, sexuality, asceticism and early Christianity see Brown (1988); Clark (1986); Clark (1993); Cloke (1995); Cooper (1996); Elm (1994); Pagels (1988).

[4] Jer. *Ep.* 130, *PL* XXII. 1107–38. Augustine replied with a treatise addressed to Anicia Juliana *On the good of widowhood* (August *de bono vid.*, *PL* XL. 429–50) in which

Anicia Juliana was a member of one of the most powerful families of Late Roman society. The family could claim Christian ancestry coupled with successful political careers. Proba, Demetrias's grandmother, had been married to one of the greatest men of the period, Sextus Petronius Probus. Their son, Anicius Hermogeniasus Olybrius (*cos.* A.D. 395), had married Anicia Juliana and fathered Demetrias. Proba had consecrated herself to God on the death of her husband and gathered a group of like-minded women about her in Rome. Following the sack of Rome by Alaric, the women of the family had fled the city and established themselves on their North African estates. Despite the upheavals of the move to North Africa, and the subsequent widowhood of Anicia Juliana, the social norms of the upper classes seem to have been firmly in place as not long after their arrival the wedding of Demetrias was planned to take place.[5]

Jerome's letter was written towards the end of his life, when he had been living in Bethlehem, away from Roman society for nearly 30 years. It epitomises much of his earlier work on how to live the ascetic, virgin life, particularly in outward appearance. The letter starts with praise of Demetrias and her mother and grandmother, and gives a brief eulogy of their family history.[6] Though he has never met Demetrias, Jerome goes on to describe her sudden conversion and subsequent behaviour with the detail of an eye-witness. He describes the young woman's anxieties at her decision: 'will you, now an exile, accept an exile for your husband? Where will you find a matron to be present at your bridal? . . . Why do you fear your grandmother and dread your mother?'[7] In the same vein Jerome describes the joy of the women at Demetrias' decision—a virgin was to make a noble house nobler still by her virginity.[8] Jerome gives the impression of universal joy across the Roman world at the decision. He continues with praise of Proba, enumerating the hardships she has faced, particularly the most recent

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he suggests Demetrias read his earlier work *On Holy Virginity* (August *de sancta virg.*, *PL* XL. 395–428). He followed this up with letter 188 (*PL* XXXIII. 1045). Pelagius's letter *Ad Demetriam* is found at *PL* XXXIII. 1098–121. Migne lists the fourth treatise as coming from Pope Leo, but it is now attributed to Prosper of Aquitaine *Epistola ad sacram Demetriam PL* XLV. 161–80.

[5] For details on the family see *PLRE* I. 732; Stemma 7. For Sextus Petronius Probus see *PLRE* I. 736; Stemma 24; Amm. 27.11; Croke and Harries (1982) 115–17. For Anicius Hermogenianus Olybrius see *PLRE* I. 639. See also Jer. *Ep.* 130.4, *PL* XXII. 1108; August *Ep.* 130.30, *PL* XXXIII. 588.

[6] Jer. *Ep.* 130.3.

[7] Jer. *Ep.* 130.5.

[8] Jer. *Ep.* 130.6.

blow of the death of her son.[9] The remainder of the letter addresses the lifestyle Demetrias should follow: prayer, penitence, reading the Scriptures, and fasting. He discusses the type of companion she should have; abjures her to avoid riches; advises her to occupy her time with wool working; and tells her to avoid baths. The letter repeats, on his own admission, much of what he had written 30 years ago to another young woman, Eustochium.[10] It is an impressive swan song for Jerome on how to live the virgin life, reiterating many of the motifs he has previously used in letters to women. In this paper, it is used as a case study for Jerome's manipulation of the language of dress. The relevant extracts are reproduced:

> Her strength of mind was incredible, amongst silks and gems, and amongst crowds of eunuchs and serving women, and a bustling household of flattering and attentive domestics, and the daintiest of feasts that the abundance of a large house could supply, she preferred severe fasting, rough clothing and a frugal life.[11]

On her wedding day:

> …precious necklaces, costly pearls and glowing gems were returned to the cases. Then a coarse tunic was put on and an even coarser cloak thrown about (her).[12]
>
> When you were in the world you preferred the things of the world. You rubbed your cheeks with rouge (purple) and used white lead to improve your complexion. You dressed your hair and built up a tower on your head with tresses of others. I shall be silent on the costly earrings, the glistening pearls from the Red Sea, your bright green emeralds, your flashing onyxes, your liquid sapphires, stones which set fire to the desires of matrons and make them mad.[13]

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[9] Jer. *Ep.* 130.7.

[10] Jer. *Ep.* 130.19.

[11] Incredibili animi fortitudo, inter gemmas et sericum: inter eunuchorum et puellarum catervas, et adulationem ac ministeria familiae perstrepentis, et exquisitas epulas, quas amplae domus praebat abundantia, appetisse eam jejunorum laborem, asperitem vestium, victus continentiam (Jer. *Ep.* 130.4, *PL* XXII. 1108).

[12] Pretiosa monilia, et graves censibus uniones, ardentesque gemmae, redduntur scriniis: vili tunica induitur, viliori tegitur pallio (Jer. *Ep.* 130.5, *PL* XXII. 1110).

[13] Quando eras in saeculo, ea quaerant saeculi diligebas. Polire faciem purpurisso, et cerussa ora depingere; ornare crinem, et alienis capillis turritum verticem stuere. Ut taceam de inaurium pretiis, candore margaritarum, Rubri maris profunda testantium; smaragdorum virore, cerauniorum flammis, hiacynthorum pelago, ad quae ardent et insaniunt studia matronarum (Jer. *Ep.* 130.7, *PL* XXII. 1113).

On choosing companions, Jerome advises: choose staid and serious women i.e. virgins and widows:

> Shun gay and thoughtless girls who deck their heads and wear their hair in fringes, who use cosmetics to improve their skins and affect tight sleeves, dressed without a crease, and dainty slippers; and in the name of virgins put themselves up for sale. Moreover the character and tastes of a mistress are often inferred from the behaviour of attendants. Regard as fair and lovable and a fitting companion one who is unconscious of her good looks and careless of her appearance; one who when she goes out in public does not expose her décolleté nor reveals her neck with her cloak thrown back. But one who veils her face, and goes about barely exposing one eye, when she needs it to find the way.[14]

On men to avoid:

> a virgin should avoid as so many plagues and banes of chastity all ringletted youths who curl their hair and scent themselves with foreign musk…I need not speak of those who by their pernicious visits to virgins bring discredit of themselves and these…For as it is, it is almost more dangerous for giddy girls to show themselves in the abodes of religion than to walk abroad.[15]

There are several ways of reading this text and its subtext. In terms of using it as a literary representation of attitudes to dress, there is, firstly, the complex issue of the role of literary *topoi*; secondly, the interlinking of such *topoi* with late antique Christian attitudes to gender and the use of gender stereotypes; and thirdly, the question of Jerome's particular approach to these two subjects. We might also legitimately ask how we are to use such material, produced by men, to help us interpret female dress, and attitudes to female dress, in the period?

Jerome's letter includes several of his favourite themes, relating to the outward appearance and conduct of a woman dedicated to the spiritual life. His complex, controversial and often paradoxical

[14] Fuge lasciviam puellarum, quae ornant capita, crines a fronte demittunt, cutem poliunt, utuntur pigmentis, adstrictas habent manicas, vestimenta sine ruga, soccosque crispantes: ut sub nomine virginali, vendibilius pareant. Mores enim et studia dominarum, plerumque ex ancillarum et comitum moribus iudicantur. Illa tibi sit pulchra, illa amabilis, illa habenda inter socias quae se nescit esse pulchram; quae negligit formae bonum, et procedens ad publicam, non pectus et colla denudat, nec pallio revoluto cervicem aperit; sed quae celat faciem, et vix uno oculo, qui viae necessaries est, patente ingreditur (Jer. *Ep.* 130.18, *PL* XXII. 1122).

[15] Cincinnatulos pueros et calamistratos, et peregrini muris olentes,…quasi quasdam pestes et venena pudicitiae virgo devitet (Jer. *Ep.* 130.19, *PL* XXII. 1122).

relationships with women are not the central focus here,[16] but his general assumptions about female nature are part of the key to the methodological difficulties of studying female dress through texts in this period. In this Jerome is no different from his male contemporaries: in almost any context in which we should find them, representations of female dress are the product of a male world view. The literary use of dress as a shorthand to reflect the character of a particular individual or group was common practice among classical and late antique writers, both Christian and non-Christian.[17] In the Roman world it was essential to be seen in the correct clothing of one's class and station—you were what you wore—thus describing inappropriate dress became an easy rhetorical device to undermine an individual's moral status. This technique inferred by opposition an image of a correctly dressed, and thus morally upright, ideal individual. Definition by antithesis was a common ploy of Jerome's literary technique. He appears to get much more pleasure out of describing items of apparel, body language, and situations forbidden to his female disciples than from prescribing an ideal regime for them.

Jerome praises Demetrias for rejecting the comforts of her aristocratic life for the hardships of asceticism. She avoids silks and jewels, fawning attendants (particularly eunuchs), and good food, in favour of the frugal life. Jerome's commendation of Demetrias's rejection of her precious jewels and pearls in preference for a coarse tunic and rough cloak is reinforced by one of the parodies in which he has indulged in previous letters to female correspondents. In his typical manner, he lists cosmetics and false hair as unwelcome items, and though he starts by saying he will not mention her jewels, he goes on to list an extensive range of exotic gems. Later on he returns to the theme in describing the sort of women that Demetrias should not consort with: those who wear cosmetics, affect tight sleeves, and dress to reveal parts of their bodies which a modest woman would cover. Jerome would prefer Demetrias to be completely veiled when outside, leaving only one eye uncovered in order to see where she is going. These are motifs that have all been present, in various ways, in Jerome's earlier correspondence.

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[16] On Jerome's relationship with women, see Clark (1979); Kelly (1975).

[17] For recent articles on the rhetorical use of dress and on dress in particular literary contexts, see Callu (2004) 187–94; Dyck (2001) 119–30; Hales (2005) 131–42; Harlow (2005) 143–53; Heskel (1994) 133–45; Molinier-Arbo (2003) 67–84; Neri (2004) 223–30; Salles, (2003) 57–66.

In previous versions of this type of letter the image of the false virgin was reiterated repeatedly. In the earliest, addressed to Eustochium in A.D. 384, while he was still living in Rome, Jerome warned Eustochium (aged about 11 at the time) against women who dressed to attract notice; who had tunics with a narrow purple stripe,[18] who wore loose headdresses which left their hair free, or who wore lilac mantles, had tight fitting sleeves, or were shod in cheap slippers.[19] The *topos* was repeated in a letter to Marcella, on the death of Blesilla: Christians should be scandalised by women who painted their faces with rouge and white lead and used false hair pieces; they were attempting both a deceptive beauty and to preserve the illusion of a youth they no longer possessed.[20] Jerome reported that Blesilla had rejected all of these female accoutrements on the death of her husband and instead had chosen a dark dress (so that lying on the ground did not harm it), a simple veil, cheap shoes and a plain, clean girdle without jewels—to keep her clothes correct, not to give her a shapely figure.[21] Blesilla's adoption of severe asceticism was thought by many of her contemporaries to be instrumental in her early death.[22] Social outrage at her death was part of the impetus behind Jerome's departure from Rome for the Holy Land.[23]

Nearly 20 years later, in A.D. 405, Jerome wrote an unsolicited letter to a mother and daughter living in Gaul.[24] His critics claimed that the recipients of this letter were fictitious.[25] To a certain extent that question is academic here as it is the theme that is of interest, however, the similarity of much of the content to other letters on how to live the celibate ascetic life, and to John Chrysostom's treatise on the same subject, suggest this may be Jerome offering his view on a difficult contemporary issue.[26] According to Jerome the mother and daughter were co-habiting with celibate men but purporting to live the spiritual life. In the letter he uses a similar vignette to that described above to

[18] Purple always had connotations of wealth and status. See Delmaire (2003) 85–98.
[19] Jer. *Ep.* 22.13, *PL* XXII. 402.
[20] Jer. *Ep.* 38.3, *PL* XXII. 464. Cf. Jer. *Ep.* 54.7, *PL* XXII. 553.
[21] Jer. *Ep.* 38.4, *PL* XXII. 464–65.
[22] Jer. *Ep.* 36.6, *PL* XXII. 472. On Jerome and Blesilla and contemporary reaction, see Cooper (1996) 68–69, 81–82.
[23] Jer. *Ep.* 45, *PL* XXII. 480–84.
[24] Jer. *Ep.* 117, *PL* XXII. 953–60.
[25] Jer. *Contra vigiliantium* 3, *PL* XXIII. 341.
[26] Joh. Chrys. *Adversus eos qui apud se habent virgines subintroductas*, *PG* XLVII. 532.

impress upon his correspondents the views that others will take of their behaviour, given the way they appear. Addressing the daughter, Jerome writes that 'your very dress, cheap and sombre as it is, is an index of your secret feelings'. From his repertoire of images he creates a verbal picture of a woman who trails her uncreased dress along the ground in order to make her look taller; whose vest is artfully ripped in order to expose her flesh; the creaking of whose shoes attracts young men;[27] whose girdle is drawn tightly and whose bust is thus carefully defined; and whose shawl is disingenuously dropped to expose bare shoulders, which are then quickly covered again to suggest a mistake.[28]

Jerome's debt to the satirists of earlier times is clear in that all women come under critical scrutiny.[29] A typical female member of the aristocracy, who may wear silk, jewellery, or patterned clothing, is criticised as attempting to attract men other than her husband, or as showing off her wealth to an indiscreet extent. Even a woman who has taken up his chosen form of ascetic life is no less free from criticism. Most of them simply do not live up to his ideal and he accuses them of being false virgins. These types suffer his forthright, sarcastic and derogatory rhetoric accusing them of using ascetic 'fashion' to conceal seduction techniques. They wear the right clothing in the wrong way. Finally, even those who dressed in a manner that should theoretically have pleased him are criticised. For example, those who attracted notice by being overly dirty, dressing themselves ostentatiously in goat hair and hooded cloaks, are condemned.[30] He saw even those who attempted to dress according to his guidelines as doing so out of pride.[31] The point is that in this rhetorical game, reminiscent of Juvenal, women, good or bad, ascetic or not, cannot win. Jerome criticises almost all of them alike. Those that merit his praise are few and he uses his style of antithetical description—listing what they have denied themselves—in

[27] Creaking shoes is a common motif, and I had often wondered at its significance as it is always mentioned in the context of attracting attention. I thank my colleague Dr. Elena Theodorakopoulos for drawing my attention to the use of the same motif by Catullus to describe the arrival of his mistress, Lesbia: 'There with soft steps my gleaming goddess came and placing her shining foot on the worn threshold she stepped on it and her sandal creaked', Catull. 68, 70–72. The association with illicit sexual behaviour is clearly implied here.

[28] Jer. *Ep.* 117.7, *PL* XXII. 957.

[29] On Jerome's relationship to earlier satire, especially Persius and Juvenal see Wiesen (1964) chapts. 1, 4.

[30] Jer. *Ep.* 22.27, *PL* XXII. 413.

[31] Jer. *Ep.* 39.1, *PL* XXII. 466.

order to praise them. In a letter written in praise of Paula her virtues were highlighted against a series of worldly female activities she had rejected, which by now are quickly recognisable to the reader of Jerome. He claimed that she constantly tried to atone for having 'painted her face with rouge, white lead and antimony' and having 'given her body up to pleasures'; and that she now made up for laughter with constant weeping and exchanged soft linen and expensive silks for rough goat's hair.[32]

For Jerome the ideal woman is one who, like Lea, 'wore coarse sack cloth instead of soft raiment, . . . [was] careless of her dress, neglected her hair'.[33] Clothing should be sober and plain, and shapeless to conceal the body. Its function was to cover the body and keep out the cold.[34] Women's appearance should neither provoke comment not call for admiration.[35] Slovenliness and showiness were both to be shunned.[36] Holy women should reject all items of luxury, which in terms of dress meant silks, gold and jewels, and any item, or way of wearing it, that would attract attention.

These examples illustrate the ways in which Jerome used the language of dress and very visual images of dressed women to transmit messages that were only very peripherally about dress. Jerome was well read in both the classics and earlier Christian literature. Any quick reading of his letters, treatises and exegeses demonstrates the range of his intellectual grasp. While he is somewhat disingenuous about his reading of the classics, it is clear that he has been influenced by them.[37] The image of women that he presents has a long history, indeed pedigree, in both Greek and Latin literature. The themes that he addresses by using the metaphors and language of dress are those that were familiar to his audience of well-read Christians.

[32] Jer. *Ep.* 108.15, *PL* XXII. 891.
[33] Jer. *Ep.* 23.2, *PL* XXII. 426.
[34] Jer. *Ep.* 107.10, *PL* XXII. 875. Cf. Clem. Al. *paid.* 2.10, *PG* VIII. 524.
[35] Jer. *Ep.* 46.10, *PL* XXII. 490.
[36] Jer. *Ep.* 52.9, *PL* XXII. 535.
[37] Jerome often refers to classical and early Christian authors either by naming them or by inference. As there are too many single examples to list I offer a few illustrative examples here: Jer. *Ep.* 30 to Cicero and Plautus; Jer. *Ep.* 22 to Tertullian; Jer. *Ep.* 58 to Cyprian; Jer. *Ep.* 84 to Clement; Jer. *Ep.* 48.19 lists Origen, Tertullian, Clement and Cyprian. See also n. 20.

Attitudes to Female Dress in Earlier Christian Literature: A Brief Survey

In terms of treatises on dress he had the precedents of Tertullian, Cyprian and Clement of Alexandria, authors he mentions often in his work.[38] Tertullian (*ca.* A.D. 150–230) wrote two treatises on the dress of women (*De cultu feminarum, ca.* A.D. 190). In these he condemned the luxury and extravagance of female dress as he perceived it. Tertullian was of the view that women bore the blame for the sin of Eve who brought about the Fall. All women carried the responsibility of this and thus should wear penitential garments as an outward sign of that sin. For him, luxurious dress, the use of gold and purple, and the wearing of jewels merely drew male attention to women and proved them to be little short of prostitutes. Essentially, Tertullian thought that nothing should be used to enhance the natural appearance of either humans or the materials that they wear. In a trite comment that is borrowed by Cyprian, Tertullian argued that if God had wanted to produce sheep with purple and sky blue fleeces he would have done so.[39]

The principle virtue of a Christian woman was modesty so a woman who adorned herself not only committed the sin of pride but also became the object of sinful desires in others and thus an accessory to their sins.[40] Tertullian put it very succinctly: for women there is dress (gold, silver, jewels and clothes) and make-up (care of the hair, skin, and those parts of the body which catch the eye): the one reflected ambition, the other prostitution.[41] The good Christian woman should not, however, go to the other extreme of being utterly uncultivated or unkempt—'I see no virtue in squalor and filth'—but should aspire to natural and demure neatness.[42] This meant no make-up,[43] no dyeing of hair either to disguise origin or ageing,[44] and no wearing of wigs or false hair pieces.[45] In responding to those who argued that they had to dress up in public, Tertullian countered that as Christians they should not be attending such events; as he says, 'people only wear fancy dress because

[38] Jer. *Ep.* 84.2: recognising the debt Cyprian owed to Tertullian.
[39] Tert. *De cultu.* 1.8.2, *CCSL* I. 350; Cypr. *De habitu* 14, *PL* IV. 465.
[40] Tert. *De cultu.* 2.2.1, *CCSL* I. 354.
[41] Tert. *De cultu.*1.4.2, *CCSL* I. 347.
[42] Tert. *De cultu* 2.5.1, *CCSL* I. 357.
[43] Tert. *De cultu* 2.5, *CCSL* I. 357–58.
[44] Tert. *De cultu* 2.6.1–4, *CCSL* I. 359–60.
[45] Tert. *De cultu* 2.7, *CCSL* I. 360–61.

of those gatherings and the desire to see and be seen', he suggests they go out in public either for reasons of wantonness or of vanity.[46]

From Tertullian, then, Jerome absorbed notions of the place of women in the Christian world, the way they should look and dress and moral attitudes that informed these views. Similar themes recur in Clement (*ca.* A.D. 150–215), who likewise warned against the love of ornament, artificial hair and wreathed curls, and the dyeing of wool and multi-coloured clothing (in the *Paidagogos*,[47] written about A.D. 190). Clement argued that the purpose of clothing was to cover the body and protect against the elements, thus he saw no reason why both sexes should not be treated alike, with certain exceptions: while he argued that women's eyes ought to be covered, he also made some concession to them, on account of their weakness. He warned that both women and men should beware of extravagance. Women, Clement conceded, might wear softer fabrics, but should avoid fabrics that were foolishly thin, and gold and silk textiles—these superfluous and diaphanous materials were deemed proof of a weak mind.[48] In essence, Clement condemned luxurious clothing that did not conceal the shape of the body, but rather made it visible to spectators. Clement also saw no reason for dyeing cloth, arguing that colour did not help to protect the body against the cold, and attracted the glances of others. He considered white (for Clement the natural colour of truth) a suitable colour for those who were white within.[49] Coloured clothes and those with gold and purple, and especially those with flowers and beasts figured on them, were made for looking at not for covering.[50] Clement argued that even chaste wives were distracted from their duties when they became fond of finery.[51] His argument here stretched to the question of household economics in that clothes decorated with pictures faded in the course of time and steeping in dyes made the fabric weak and not long lasting. Furthermore, he argued, Christians should not seek out rarity and costliness, and they should not be fooled into thinking that such items represented the truly beautiful and the truly good. Likewise Christian women who wore expensive gems and gold were obscuring

[46] Tert. *De cultu* 2.11.1, *CCSL* I. 366: citing Ov. *Ars am.* 1.99.
[47] Clem. Al. *paid.* 2.10, *PG* VIII. 525.
[48] Clem. Al. *paid.* 2.10, *PG* VIII. 524.
[49] Clem. Al. *paid.* 2.10, *PG* VIII. 528.
[50] Clem. Al. *paid.* 2.10, *PG* VIII. 528.
[51] Clem. Al. *paid.* 2.10, *PG* VIII. 528.

their true beauty. Clement thought they would do better to reject such ornamentation entirely and spend the money on charitable works.[52] In his view, it was not seemly for any part of a woman to be exposed. A woman should have her head veiled and her face covered. The veil, like the dress, should be plain and neutral-coloured, and he commented particularly on women who made themselves conspicuous by wearing a purple veil. Purple, of course, carried all sorts of connotations of wealth, royalty and social aspiration.[53] Clement also commented on shoes. He recommended white, greased shoes for women except when on a journey when nailed shoes were required. While he thought bare feet best, he acknowledged that this was both unsuitable for women in terms of their modesty, and with respect to the innate tenderness of their bodies. For men bare feet were suitable except on military exercise.[54] Clearly the danger of creaking leather shoes was one that exercised Clement in the same way as it was to bother Jerome.

Towards the end of the treatise, Clement included a compendium of earlier advice: clothes should be simple, of white colour without pattern. A woman should wear a plain and becoming dress, softer than that suitable for a man, but not immodest or in any way luxurious. Garments should be suited to age, person, figure, nature and pursuits. He was slightly more lenient than Tertullian in the matter of jewellery. He thought earrings bad as humans should not presume to bore holes in the bodies given to them by God, but for some women some jewellery was allowed to please their husbands. Seal rings were permitted as, unfortunately, servants could not be trusted. Women should dress neatly and bind themselves with a band of chaste modesty. Their hair should be bound simply at the neck with a plain pin and the notion of false hair was completely rejected.[55] So from Clement, Jerome could expand and reinforce his repertoire of motifs. The sense of the misuse of wealth in personal adornment was strong in Clement's writings. He objected particularly to the excessive use of gold and purple, and to importing foreign and costly materials such as silk. Reading Clement can only have improved Jerome's set piece descriptions.

The final author considered here is Cyprian of Carthage (d. A.D. 258). His work was clearly influenced by that of Tertullian. In the *Dress*

[52] Clem. Al. *paid.* 2.10, *PG* VIII. 529.
[53] Clem. Al. *paid.* 2.10, *PG* VIII. 533–36; Delmaire (2003); Reinhold (1970).
[54] Clem. Al. *paid.* 2.11, *PG* VIII. 536–40.
[55] Clem. Al. *paid.* 3.11, *PG* VIII. 626–61.

of Virgins (*de habitu virginum)*, Cyprian argued that a virgin ought to be self-evidently virginal from her outward appearance; she had no need of adornment as she was not seeking a husband.[56] Cyprian used Paul (1 Tim., 2.9) and Peter (1 Peter, 3. 3–4) as the basis for his argument that women who were wealthy in spirit and chaste in life needed no outward sign of adornment.[57] Like his predecessors, Cyprian decried extravagant hair and conspicuous parading in public in order to attract the gaze of young men.[58] He saw the attributes of ornament and clothing as unsuitable for any group but prostitutes and stated that the more expensive the dress the cheaper its wearer's modesty.[59] Chapter 14 of *On the Dress of Virgins* illustrates the common currency and repetitive nature of some of these assertions. Here, like Tertullian, Cyprian argues that God did not make scarlet or purple sheep or teach shellfish and plants to dye wool; nor did he make necklaces setting jewels in gold; nor did he puncture ears in infancy. All these things, like dyeing hair, colouring the face and outlining the eyes with black, were the work of fallen angels.[60]

Conclusion

These short extracts make the point that Jerome was well versed in classical and literary *topoi*, all of which he used in his armoury of devices to criticise women and what he saw as their innate failings. In his letters dress and adornment are used to present a commentary on social vices and virtues. Jerome, whose whole ascetic position preached against wealth and luxury, could, and did, stress the traditional symbols of excess, such as the use of silk, of gold and of golden thread, as signs of evil. Silk was consistently identified as a luxurious product. It was difficult to produce, and thus expensive to acquire, and at times exquisite in its design. Tertullian, Clement, Cyprian and Jerome all used it as a symbol of excessive luxury. John Chrysostom (*ca.* A.D. 349–407), a contemporary of Jerome, used it as a common theme in his sermons

[56] Cypr. *De habitu* 5, *PL* IV. 457.
[57] Cypr. *De habitu* 8, *PL* IV. 460.
[58] Cypr. *De habitu* 9, *PL* IV. 460.
[59] Cypr. *De habitu* 12, *PL* IV. 462–63.
[60] Cypr. *De habitu* 14–17. Cf. Tert. *De cultu.* 1.8.2, *CCSL* I. 350.

against wealth and women.[61] Gold had similar associations. Gold thread was used to give patterned and figured textiles extra value.[62] Other literary evidence of the period suggests that the elements that were perceived as luxurious—silk and patterned silk weaves, especially those containing precious jewels and gold—were in such great evidence in late antique society to the extent that there was a movement to restrict their use.[63] Jerome uses his double-edged technique of describing in one phrase and undercutting with another to describe the cloth of gold that covered Blesilla's funeral bier. This rich covering pays homage to her status and worth in the eyes of Roman society, but Jerome finishes the sentence imagining Blesilla's remark: 'such is not the garb I used to wear; this magnificence is strange to me'.[64] Thus the rhetoric of cloth maintained both the social and the spiritual image of Blesilla.

The rhetoric of dress (and, obviously, clothing itself) is evidently gendered. As with all matters of female life and lifestyles in the classical and late antique world, literary images of female dress are derived from male sources. The question of female dress is wholly enmeshed in a stereotypical view of women and female nature and thus needs very careful unpicking. This raises real questions about how this material can be used to say anything about actual female dress, a problem compounded by our lack of material evidence. Unlike early modern historians, we cannot compare texts with surviving items of dress, and look at the effect of 'dress in action'. While we do have surviving visual images and some material remains, these only survive in particular contexts. Mosaic images that adorn the walls of churches such as Santa Maria Maggiore at Rome (early 5th c.) and San Vitale and San Apollinare in Ravenna (mid 6th c.) illustrate highly decorated textiles, and shine with the use of gold, all used in a positive manner to glorify the Christian faith. This is a different 'language of dress' to that of Jerome. The textiles that survive in museum collections display the vibrant decoration that Jerome rants against, indeed, they have often survived at the expense of the rest of the garment, precisely because of this decoration. What we cannot have is any sense of how these garments

[61] Delmaire (2003) 89; Hartney (2002) 243–58.
[62] Hieron. *Ep.* 117.6, *PL* XXII. 957.
[63] Morelli (2004) 55–78 on the Price Edict of Diocletian; Delmaire (2004) 195–202 on the legal sources.
[64] Jer. *Ep.* 39.1, *PL* XXII. 466.

flowed on the body, or could be arranged to display the flesh, or of the effect of, say, 'tight sleeves'.

Hence, the problematic relationship between the rhetoric and reality of dress is heightened by our inability to find a contemporary image that matches any of Jerome's descriptions, either of the committed female ascetic or of the false virgin. His vignettes create a vibrant caricature of Late Roman life, which, put alongside other similar descriptions can potentially mislead us as to the extent of our knowledge. The rhetoric of Jerome presents a particular view of the world the relation of which to reality is sometimes impossible to determine; what can be said, though, is that continuity of *topoi* indicate that these are not descriptions, unless clothing did not change over the best part of 300 years. Visual images demonstrate that this is not so, but, as is the case with literary representations, visual images comply with a set of artistic conventions.[65]

The moralising discourse and repeated literary motifs and descriptions in early Christian writers can be used more successfully as background noise to inform our ways of thinking about dress, and of using dress and its imagery to think about social trends. As A. Ribeiro says in the introduction to her book *Dress and Morality* (which briefly addresses much of this material in its first chapter): "This book does not claim to be a history of dress…but about people's attitudes to certain kinds of dress which they felt, within the prevailing social and cultural framework, to be taboo".[66] This literature can be used to inform us about the social customs of what to wear; or of social taboos, what not to wear; but how far it reflects contemporary dress is questionable. This is particularly important if one considers the recipients of ancient literature. While Jerome may have written to and for an unusually large group of female correspondents, the principal audience for his writings and those of other Christian writers, was male:[67] early Christian rhetoric may look to us as if it was addressed to women, but its main audience was men. By understanding what was not acceptable for women, men also understood what was, and what was not, acceptable for them.

[65] Harlow (2004a)—in this paper I attempted to jigsaw together visual, literary and material evidence. I have since rethought this position, and this paper is central to the rethinking; Baratte (2004).

[66] Ribeiro (1986) 18.

[67] Hartney stressed this point in her article on the use of dress in the sermons of John Chrysostom; Hartney (2002) 244.

They had to guard against the manifold temptations of women trying to attract them, all the immoral connotations and emasculating effects of soft and decorated textiles—even the temptation to depilate, dye or curl their hair or trim their beards.[68]

It is the consistency of the message over several centuries that makes it problematic. As claimed at the outset of this paper, ancient Romans had a very strong sense of their own identity through appearance, and were clear that certain types of dress relayed certain messages. These male and female clothing stereotypes are too commonplace for us to appreciate their nuances after so much time. It could be argued that the vignettes of Jerome demonstrate a perceptive power of observation, and certainly there must be enough 'realism' for his audience to appreciate what he is saying—however this is not the same as saying he is describing the dress accurately, nor was this his intention. The repetition of the motifs derive from other agendas which must be clearly recognised before we begin to consider the text or make claims for it in relation to actual dress. What these texts demonstrate is that over a period of 400 years, and probably longer, an apparent consensus existed, in the western Roman empire, on the way women and their appearance could be presented. Furthermore this was a notion that crossed the pagan/classical/Christian divide, although the Christians found new justifications for the subordinate place of women in the world. Not all Christian writers wrote with the same agenda—Clement is far more concerned with practicalities of lifestyles, whereas John Chrysostom preaches to crowds in the churches of Antioch and Constantinople, presumably to a far wider social group. However, it does appear that the gendered structure of society at its most fundamental level was more significant than the social and religious divisions created by the coming of Christianity. The inherited stereotypes were powerfully enduring.

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[68] Male dress also fits the gendered discourse. See Harlow (2004b).

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RELIGIOUS SPACE

OBJECTS IN CHURCHES: THE TESTIMONY OF INVENTORIES

Béatrice Caseau

Abstract

This article discusses the objects found within churches, using the testimony of inventories. These describe items such as church plate, lighting apparatus, textiles, and censers, not often found in archaeological excavations of churches. Comparison of inventories reveals churches of different status, and also something of their atmosphere. The differing style of these texts includes terms that are far from easy to interpret. It can also be difficult to correlate the items in inventories with real objects in museums, as is shown in a case study of censers.

Introduction

Inventories are a key source in investigating the objects kept and used inside churches during Late Antiquity. They are, however, both rare and difficult to interpret. P. Van Minnen has counted 11 inventories among Greek papyri and 5 among Coptic papyri or ostraka.[1] Searching more widely, M. Mundell Mango has counted 30 inventories or donor lists, of which 20 list objects donated to churches in Rome.[2] That leaves only 10 other churches across the Mediterranean for which we have any sort of inventory (usually incomplete), which compares with 12 ecclesiastical treasures found in hoards.[3] This article is about both the usefulness of such inventories to picture the liturgical objects kept inside late antique churches; not just cathedrals, but also village churches, such as a 5th to 6th c. inventory from the church of Ibion,

[1] Van Minnen (1991) 47–48. I wish to thank Luke Lavan for his numerous and welcomed suggestions.

[2] Mundell Mango (1992) 124. The discrepancy between Van Minnen and Mundell Mango's figures, if we exclude the Roman churches is due to one unpublished papyrus from Prague cited by Van Minnen (1991) 47 n. 25.

[3] More treasures could belong to churches, among the 40 or so treasures discovered, but 12 have inscriptions linking the objects to a church; Mundell Mango (1992) 124.

L. Lavan, E. Swift, and T. Putzeys (edd.) *Objects in Context, Objects in Use* (Late Antique Archaeology 5 – 2007) (Leiden 2007), pp. 551–579

in Egypt (discussed in detail in an appendix). Although I am concerned mainly with the internal difficulties of using inventories, reference is made to other sources for church interiors which make the lists easier to understand. Such sources include objects recovered during excavations of churches and also those found in church hoards, such as those in the Metropolitan Museum in New York or the Walters Art Gallery in Baltimore (to cite just two examples).

Methodological Issues

The best written sources listing liturgical objects remain the inventories of church treasures and records of donations, such as the ones made to the Roman churches and preserved in the *Liber pontificalis ecclesiae romanae*. Among inventories, those written on papyri or sometimes on *ostraka* are extremely precious because they have not been tampered with through the manuscript tradition. We can assume that the vocabulary they use was common directly at the time of writing. However, when the papyri are damaged, the restitution of words is often necessary and can be hypothetical. Inventories could be formal documents kept inside a church in order to identify objects (a necessary task after the vacancy of a see, for example), or simple lists quickly scribbled by a deacon for his own use. In the latter case, the words used for each object may not have been very precise, as long as they were meaningful to him. In both cases, the first difficulty is to understand the words themselves, especially when they do not appear to be commonly used in contemporary literary sources, or when they are used in completely different circumstances centuries earlier. Moreover, while some words mentioned in late antique ecclesiastical inventories are familiar, at least, in another context, many are simply not otherwise attested. The vocabulary is being created, and it fluctuates, because items of Church plate do not yet have fixed conventional names.[4] Some of the words present in papyri and unattested otherwise, may have been commonly used in Egypt and not elsewhere, or they may have been too colloquial to be used in a literary text and thus they have not come down to us.

In most inventories, the objects are named, and only described briefly, if at all. Their authors take it for granted that readers will understand what kind of objects they are referring to. The task of the translator is

[4] Leader-Newby (2004) 63.

to come up with a word which will mean something to most readers. The modern word can sometimes be misleading, because the objects have changed in shape or in use throughout the centuries, however the alternative, which is to transliterate the word, does not help modern readers unless some kind of interpretation is provided concerning the shape and the use of such an object. Inventories do not provide an explanation of the proper or common use of the objects they cite but they sometimes provide us with interesting details, for example, concerning the metal used, the weight, or the price of an object. Sometimes, they also reveal if the object is plain or ornamented. Yet, even a precise description of an object does not always indicate what it was used for, or *how* it was used. The second difficulty is therefore to find out what kind of liturgical use many of the objects cited in the texts might have had.

In order to interpret these lists of words, and so produce a meaningful inventory for the reader, we can turn to descriptions of liturgical objects found in *ekphraseis* (praiseful, encomiastic descriptions of churches), in exegetical commentaries and homilies (especially those alluding to the liturgy), and in canons and liturgical commentaries, which often allude to liturgical objects, but which seldom provide much description of them. We can also turn to the nameless objects recovered by archaeology, the most precious among which eventually end up, cleaned and restored, on display in museums. It is tempting to try to match terms in inventories with these objects. However, this task requires caution and can sometimes be quite daunting because the same name can be applied to different types of objects with the same function, and different names can also be applied to the same objects. For curtains, for example, one can read καταπετάσμα, a word used in the Septuagint and in the New Testament and adopted by many authors, and also παραπετάσμα.[5] Attempts to find a difference between them have proved fruitless.[6] Regional differences, the flexibility of languages, and the creation of words made up from different roots, all come into play to make this identification task more complex. Still, these texts offer a window on the world of objects inside late antique churches.

[5] LXX, Ex. 26:31, 33–35, 37; NT, Mt. 27:51; Mc. 15:38, 23:45; He. 6:19, 9:3, 10:20.

[6] Dolores del Amo (1995) 69 suggests a distinction between the two, but authors such as Gregory of Nyssa use both words with a similar meaning. The *Thesaurus linguae graecae* reveals that the second word is not as frequent as the first, but both are rare, used in reference to the veil of the Temple.

Church Plate

We have a number of texts offering lists of liturgical objects donated to various Roman churches in the *Liber pontificalis ecclesiae romanae* that allow us to glimpse something of their church plate. The words used in these lists are quite similar from one list to another, which probably indicates the hand of the 6th c. compiler. The *Liber* offers a list of objects supposedly donated by the emperor Constantine and/or by bishop Silvester. If the list itself is genuine and reflects the vessels belonging to the different church buildings, the date of these donations remains the subject of much debate. Some of the objects suggest a later date than the early 4th c., and though it is likely that they were not all from the reign of Constantine, they were recorded as donations under pope Silvester by the 6th c. compiler.[7] It is common in the *Liber* to attribute some decisions or some donations to early popes, although they could not have been theirs.[8] The imperial donations to the Lateran church or St Peter's basilica are quite exceptional, so it is more appropriate to start with the list provided for an ordinary Roman church. For the church he built on the estate of one of his priests, the *titulus* Equitius,[9] bishop Silvester provided all but one object, a gift from the emperor Constantine. The list reflects in all likelihood, the furnishing of the church at the end of Antiquity.

List of objects used in the *titulus* Equitius:[10]

– A silver paten weighing 20 lb, from the gift of the emperor Constantine [*Patenam argenteam, pensantem libras XX, ex dono Augusti Constantini*]
He also gave [*Donavit autem*]:
– 2 silver *scyphi* each weighing 10 lb [*Scyphos argenteos II, pens. sing. libras denas*]
– 1 gold chalice weighing 2 lb [*Calicem aureum, pens. lib. II*]
– 5 service chalices each weighing 2 lb [*Calices ministeriales V, pensantes singulos libras binas*]
– 2 silver *amae* each weighing 10 lb [*Amas argenteas II, pens. sing. lib. denas*]
– 1 silver chrism-paten, inlaid with gold, weighing 5 lb [*Patenam argenteam auroclusam chrismalem, pens. lib. V*]

[7] Krautheimer (1967).
[8] Geertman (2003).
[9] The word *titulus* itself appears only later in the 4th c. in inscriptions; see Guidobaldi (2002).
[10] *Lib. Pont.* 34 (ed. Duchesne (1955) 170).

– 10 crown lights each weighing 8 lb [*Fara coronata X, pens. lib. octenas*]
– 20 bronze lights each weighing 10 lb [*Fara aerea XX, pens. sing. lib. dena*]
– 12 bronze candlestick chandeliers each weighing 30 lb [*Canthara cerostata XII, aerea, pens. sing. lib. trecenas*]

Although belonging to an ordinary *titulus*, the list reveals real wealth. The treasure of the church includes 75 lb of silver, which amounts to 350 *solidi*, if we use a ratio of 14 to 1 between gold and silver.[11] The treasure also contains a gold chalice of 2 lb, which amounts to 144 *solidi*. Thus, when the value of the bronze objects is also included, the church gleamed with precious vessels worth more than 500 *solidi*. When compared with the inventory of Ibion, an Egyptian village church dated to the 5th and 6th c., it is grand. The village inventory included three silver chalices and one silver paten [ξέστ(ης) ἀργυρ(οῦς)], as well as bronze flasks, jugs and basins. The village church had little silver and mostly bronze, iron and wooden objects (see appendix). When compared with the donations attributed to Constantine for the Lateran church or for St Peter's basilica, it is rather modest. The Lateran was offered 17,725 lb of silver, while St Peter's received 4,780 lb.[12] This *titulus* is a well-endowed urban church, which can give us an idea of what a church, neither poor not extremely wealthy, could possess. Its treasure is comparable to the donation of about 200 *solidi* given to the church at Tivoli by its founder. One could argue that the list of objects is selective, which is true. Unlike the Ibion inventory, it does not include the most mundane of objects. Yet the number of objects cited for the *titulus* is comparable to the number of objects discovered in hoards: 54 for the *titulus*, 56 for the buried Kaper Koraon treasure. The surviving treasure belonging to the Kaper Koraon church amounts to a total weight of 82 lb of silver, a figure close to that of the *titulus*.[13]

The *titulus* Equitius list gives us an idea of what the precious objects were in a standard church. Many of the items listed are also found in buried hoards of church silver. In the treasure of Hama, chalices, candelabra and a cross have been recovered but also wine filters, spoons, phials and lamps.[14] From a liturgical point of view, the *titulus* Equitius list

[11] Bertelè (1978).
[12] Mundell Mango (1992) 134; Mundell Mango (1986) 3 gives a different figure 10,875 lb.
[13] Mundell Mango (1992) 134.
[14] Mundell Mango (1992) xxv.

is quite easy to understand. It includes patens for the *prosphora* (Eucharistic) bread, chalices for the wine and numerous lamps. We are in the presence of two sets of objects needed for the Eucharistic liturgy: gold objects or gold inlaid objects, on the one hand, and silver objects on the other. The only gold chalice was probably, if at all, used by the priest serving mass, while the 5 silver chalices were meant for communion. But even in this straightforward list, we encounter difficulties. R. Davis has chosen not to translate the two following words: *scyphus* and *ama*. The latter probably refers to a ewer or to cruets. In the Kaper Koraon treasure, and in the Daphne treasure, ewers are present. Yet nothing is clear concerning the possible shape of these particular *amae*. The word *scyphus* is also ambiguous: R. E. Leader-Newby proposes to translate *scyphus* as large chalice,[15] whilst M. Mundell Mango considers that it is equivalent to an amphora.[16] Is there a way to be sure what kind of object a *scyphus* was in this particular context? A Classical *scyphus* or *skyphos* was a rather small object (5 to 15 cm high), consisting of a deep cup with handles on each side, set on a foot.[17] Used to drink wine, or for libations, it was an object commonly known in wealthy houses of the 1st c. A.D.[18] These drinking cups were part of what F. Baratte calls "the art of banqueting".[19] Richly adorned examples from Gaul or Italy are numerous. Some *scyphoi* dated to the 1st c. A.D. have been unearthed at Berthouville, for example, where they had been donated to a temple of Mercury and where they were buried.

However, glass cups slowly replaced *scyphoi* and other silver drinking cups, which are not frequent in finds after the 3rd c.[20] They did not totally disappear from silverware, since they are still in the lists of imperial gifts to new magistrates. The *scyphus* and other drinking cups are among the objects given by the emperor Valerianus to Claudius when he becomes tribune to help him live according to his rank, if we are to trust the *Historia Augusta*.[21] Gifts of silver were common: they were offered not only by the emperors but also by magistrates and by

[15] Leader-Newby (2004) 61.
[16] Mundell Mango (1986) 4.
[17] Hilgers (1969) 76–77; 274–76.
[18] Strong (1966).
[19] Baratte (1989) 84.
[20] Baratte (1993) 4; S. Martin-Kilcher (1989) 17.
[21] SHA *Clod.* 14.4: *item in cauco et scyfo et zuma pondo undecim* (ed. Chastagnol (1994) 948).

private citizens, as gifts, token of friendship or gratitude.[22] How and why, though, was the word *scyphus* used in a list of liturgical objects? Was it because of its association with wine, or because of its particular shape, with handles? The influence of the Latin translation of the Bible may give us a clue for its lexical transfer from banquets to the eucharist. The use of *scyphus* is attested in the Vulgate translation of Exodus 37.[23] It refers to the shape of the object, which is like a floral cup.

Finally, was the function of the *scyphus* different from that of the chalices cited in the following two lines? It is obviously a much bigger object than the other chalices: it weighs 10 lb, while the chalices only weigh 2 lb. One hypothesis is that it could be used to consecrate wine for a large congregation before transferring this to smaller chalices for distribution among the faithful. The two *scyphi* may also have been used for blessed water. Finally, they may have been kept in the treasury, as objects of prestige. This is reflected in ecclesiastical inventories, where it seems clear that some of the objects were noted for their monetary value. When they intended a donation to remain in the church, donors preferred to offer prestigious silverware rather than the equivalent in coins. When we consider the *scyphi* donated to the Constantinian basilica, one of them, at least, falls into this category: made of hard coral, it was inlaid with gold and precious stones, a specially adorned and prestigious object. Naturally, this basilica, being the cathedral, was more richly furnished than other churches in Rome. The two silver *scyphi* donated to the Constantinian basilicas were even heavier than those of the *titulus* Equitius, they weighed 15 lb and one other *scyphus* of 10 lb was made of pure gold.

The function of church plate was obviously to celebrate and emphasise the liturgical acts taking place within the building, an idea which is easy for the modern mind to understand. However in late antique society such precious objects had a secondary role: that of storing bullion.[24] The silversmiths of late antiquity were as much bankers as craftsmen, and the value of the objects they produced seems to have been primarily derived from their weight rather than their beauty. Silver plate was the preferred way of displaying wealth, but the items

[22] Delmaire (1988).

[23] Vulgate, Ex. 37:19: *tres scyphi in nucis modum per calamos singulos spherulaeque simul et lilia et tres scyphi instar nucis in calamo altero spherulaeque simul et lilia aequum erat opus sex calamorum qui procedebant de stipite candelabra*.

[24] Sodini J.-P. (1979) 94–97.

were not necessarily to be used according to their shape function on a regular basis. Large churches such as Hagia Sophia may have used many chalices or patens during their liturgies, but this is unlikely for smaller churches: thus the three silver chalices of Ibion are perhaps to be understood as representing the savings of the church, and not items which were all regularly used.

Architectural Decoration and Lighting

In the donations of liturgical vessel recorded in the *Life* of Pope Silvester, we find not only eucharistic vessel (patens, chalices, cruets), but also lighting devices and precious revetment for major elements of the church furnishing (altars, *fastigium*…). Whilst it might seem odd to mention architectural revetments alongside lighting devices, their connection becomes clearer when one considers the effect that reflected light from such revetments had on the visual experience of the church. Along with coloured marbles, mosaics and textiles, they transformed the churches into spaces shining with expensive materials. Visual displays of wealth were particularly obvious in churches endowed with imperial money. Such, for example, was the Lateran cathedral in the 4th c., and the church of Hagia Sophia, also significantly called the Great Church under Justinian.[25]

Procopius, Agathias and Evagrius agree that no expense had been spared for Hagia Sophia: it was a thoroughly exceptional church in its display of wealth.[26] The altar itself was worth a fortune: it was sheathed in jewel-studded gold and covered with embroidered silk. Alas, we have no inventory for the early period of its history as a church. But a 6th c. *ekphrasis* on this church by Paul the *Silentiarius* reveals the care taken to adorn it on festive occasions (it was after all the cathedral where the emperors were crowned, and where they attended mass with their court).[27] 'Everything is clothed in beauty, everything fills the eye with wonder', exclaims Paul.[28] What made this church extraordinary was the magnitude of everything: the size of the cupola, the extensive use of precious metal to cover capitals of marble columns, the ambo, the

[25] On the 6th c. reconstruction, see Mainstone (1988).
[26] Procop. *Aed.* 1.1.22–23; Agath. 5.9.2; Evagr. 4.31.
[27] Paul Sil. *Soph.* (ed. and transl. Fayant and Chuvin (1997)).
[28] Paul Sil. *Soph.* 806 (transl. Mango (1972) 89–90).

chancel screen, the seats of the *synthronon*, the *ciborium*; some 40,000 lb of silver could be seen shining inside the church. The riches of other churches were easily surpassed both in size and number in the Great Church.

Paul is particularly amazed by the lighting of this divine church: 'no words are sufficient to describe the illumination in the evening: you might say that some nocturnal sun filled the majestic temple with light.'[29] He then proceeds to describe the numerous circular *polycandela* shedding light above the crowds. Reflected by the gold mosaics, the light of the myriads of oil lamps gave an even, soft and warm illumination.[30] For the study of lighting in more ordinary churches we can rely on a few inventory details and the testimony of archaeology.[31] The list of the *titulus Equitius* includes both crown lights hanging from the ceiling and standing lamps such as the candlestick chandeliers: 10 crown lights, 20 bronze lights and 12 bronze candlesticks. The inventory of the church of Ibion includes: 4 bronze and 2 iron lampstands, 6 hand-lamps and 4 lamps in the shape of a boat, along with the following reflective fixtures: one bronze altar, one bronze basin and one bronze tub. Clearly some effort was being made both to light the key ceremonies and to reflect light from major liturgical fixtures. From mosaic depictions we know of lamps present under the ciborium on the altar and at the sides of the altar as standing chandeliers, with polycandela hanging from the ceiling or between columns, sometimes also indicated archaeologically by holes for fixtures.[32] Lamps also burnt over saints tombs and reliquaries in *martyria*. Pilgrims took some of the precious oil home, as *eulogia*, blessing, or as medicine. Lamps played an honorific role at martyr shrines, enhanced by the presence of votive objects in metal, which reflected the light they cast. Votive plaques with Chi-Rho monograms were discovered in the Water Newton treasure.[33] In some healing shrines where incubation was practiced, lamps burned all night, partly to honour the saints, partly to protect the living against demons and partly for practical reasons, to provide light to the sick people lying in the church. Oil was expensive. Cheaper wax candles were used at the same time as oil lamps inside some churches, whilst others had to make do with smelly

[29] Paul Sil. *Soph.* 806 (transl. Mango (1972) 89).
[30] Chuvin (1997).
[31] Ross (1962) pl. XXV–XXXI; Durand (1992) 121–22, cat. nos. 68–69.
[32] Galavaris (1978).
[33] Painter (1977); (1999).

tallow candles.[34] In any case, artificial light was an essential aspect of church life. Some services were held during the night. During the Easter vigil, the newly baptised moved in procession from the baptistery to the church, for example. Portable lights were needed for procession within a darkened church. Prayers such as the "*phôs hilaron*", were offered when daylight decreased and artificial light was needed. Light held an important symbolic power that the everyday rituals of the late antique Church needed to incorporate, night and day. Windows mattered for that reason. Late antique visitors were impressed by sunlight flooding the Hagia Sophia church from above, as if it was divine light coming to earth. The importance of light was probably also appreciated by the makers of the glass windows of churches.[35] Lights served to delineate a hierarchy of spaces inside the church. The central apse, for example, was better lit than other areas of the church, since it had both windows and artificial light. It was the most sacred area, where the altar was often located and where the higher members of the clergy had seats. Seating was a privilege in Late Antique churches.

Furniture—Seats

Seating in the churches is mentioned many times in the canonical literature, with specific rules of proprietary behaviour: the young should stand up or sit on the floor to let the eldest sit in church. Yet, apart for the *synthronon* reserved for members of the clergy and a small number of inbuilt stone benches, there are very few archaeological examples of actual seats, although benches built into the lateral wall of the nave are known at some sites. One of the reasons for their absence from records is the use of wood for seating. The church of Ibion inventory confirms the presence of seats, even in a village church. It is one of very few texts mentioning benches, made out of wood, a relatively rare commodity in Egypt. Were the two wooden benches and the three armchairs meant only for members of the clergy or also for the worshippers? If we follow the examples provided by the canonical literature, we understand that seating on a bench, a stool or a seat was indeed a privilege. Seating was

[34] Bouras (1982).
[35] See O'Hea (forthcoming).

not intended for everyone. We can imagine that the armchairs were meant for the priest and the deacons, serving the church.

What about the benches? The two benches may have allowed seating for up to 6 people, depending on their size. John Moschos, who writes during the early 7th c., mentions benches and seating inside churches: Abba Theodoros in Alexandria had nothing except his books and 'he slept on a bench whenever he came across a church'.[36] Another episode of the *Pratum Spirituale* alludes to a young man sitting in a church, joined by another man who started a conversation about the salvation of the soul.[37] The Apostolic Constitutions, dated to the 4th c. but including earlier texts also refer to seating inside churches. The second book copies the *Didascalia apostolorum*, a text dated to A.D. 230:[38] 'in the church, young people shall sit apart, if there is room, otherwise they shall stand; the elders shall sit following their rank.'[39] The Syriac translation of the *Didascalia apostolorum* reveals that the clergy was meant to sit in the apse or the easternmost part of the church, then the men, then the women. Mothers and young children were seated at the back of the church, close to the doors.[40] Sitting was part of the liturgy since the text announces: 'when you stand up to pray, the leaders may stand first, and after them the laymen, and then also the women.'[41] A deacon was in charge of organising the seating for everyone, making sure that the young would leave their seats to the elders, and that poor strangers were welcome.[42] Each group was to have a specific space in the church.

Whether this canonical view of order was respected is uncertain. However, these texts reveal that seating was relatively scarce: there were fewer seating spaces than worshippers, thus the insistence on those who had to give up their seats. This is consistent with the two benches we find in the inventory of Ibion. Even in a village church, in all likelihood these two benches could not provide seating for everyone. The presence of two leather cushions indicates that privileged seating was also comfortable seating. It may be assumed that the two cushions were meant for the armchairs, and destined to soften seating for the

[36] Joh. Moschus 171 (transl. Wortley (1992) 140).
[37] Joh. Moschus 201 (transl. Wortley (1992) 179).
[38] Faivre (1977) 118–19.
[39] *Const. Apost.* 2.57.12.
[40] Caseau (2005).
[41] *The Didascalcia Apostolorum in Syriac* 12 (ed. and transl. Vööbus (1979) 131).
[42] Canon 52 (ed. and transl. Horner (1904) 195–96).

priest and the deacon. Why do we find two cushions and three armchairs? Who sat in the third cushion-deprived wooden armchair? If the armchairs were in the part of the church reserved for members of the clergy, it could be a clergyman of inferior rank. This inventory was written, by an archdeacon, for an Abba George, who may have been the landlord of the church. We can suspect that he sat on a cushion, when he came to visit. Still, without further information, we are left with conjectures.

Whoever sat on the cushion, one thing seems certain: the presence of seats in churches was designed to distinguish individuals according to their liturgical and worldly status. In the law court, the city council or other political occasions, only those of an appropriate rank had the right to sit, other people stood: in the law court this meant everyone except the judges and those of senatorial rank. Seats in *agorai* and theatres were governed by similar rules, though for people of lower status.[43] Thus it is not surprising to find only a few seats set within churches: the benches for the clergy in the *synthronon* in the apse, and a few wooden seats for the powerful or the elders elsewhere, leaving much space for those obliged to stand.

Textiles

Textiles were used to give warmth and to mute the acoustics of churches. They also revealed wealth. In some churches, wall hangings replaced mosaics. Although only a small number of church textiles have come down to us, artworks depicting churches reveal that curtains were extremely common, not only at the doors and windows, but also between columns or hanging on walls.

The Ibion church inventory records a number of textiles to cover tables and seats, as well as textiles for hanging:

– 2 hangings [καταπετάσμ(ατα)]
– 23 linen table cloths [μαμπ(άρια) λινᾶ τῆς τραπέζ(ης)]
– 5 woollen cloths (table cloths?) [μαμπ(άρια) ἐρεινᾶ]

[43] Seating in the law court: e.g. Lib. *Or.* 48.16; Lib. *Or.* 56.4. Seating in the curia: *Cod. Theod.* 12.1.4 (A.D. 317). Seating in *agorai*: Lavan (2006) 220 I am grateful to Luke Lavan for these references, which will be treated at greater length in the publication of his thesis.

– 6 door-curtains [οὐηλόθυρα], one other, old
– 1 hanging woollen curtain [οὐηλάρ(ιον) ἐρειν(οῦν) κρεμ(αστὸν)]
– 2 leather cushions [τυλάρ(ια) δερμάτ(ινα)]
– 1 triply (woven?) cloth [ἵστ(ὸς) τριύφ(αντος)]
– 1 hanging coverlet [στρῶμ(α) κρεμαστ(ὸν)]

The Ibion church had curtains specifically made for doors (θύρα): the number 6 probably means that the church had three doors. The seventh door curtain is cited as too old: we can assume that although it had not been discarded, it was out of use. We are not told what material these curtains were made of, but it is unlikely that they were made of wool, as in this case it might have been mentioned as it was for the hanging woollen curtain. A curtain made out of linen and wool is possible. There is an example of such a textile, a tapestry, in the Benaki Museum in Athens. It comes from a monastery at Antinoë in Egypt and dates to the 5th or 6th c.[44] The section preserved measures 1.05 by 0.86 m. It shows two praying figures. It is difficult to know what the wool curtain and the hanging coverlet cited in the inventory looked like. Their designs are not described. The fact that they have a special entry is probably due to the fact that they had a specific hanging space in the church.

Hangings could either adorn a particular area of the church or separate two spaces. In relatively poor churches, unable to afford marble or mosaic revetment, an embroidered piece of textile could cover and adorn part of the walls. Textiles could also mark and protect specific areas, such as the tomb or reliquary of a saint, or a recess.[45] We hear of such a practice in the West, when a man stole a cross in the church of Brioude and wrapped it in the curtains hanging on the walls: 'He ripped a cross with glittering jewels from the top [of the tomb] and tossed it to the ground; then he gathered curtains and drapes hanging on the surrounding walls. From them he made up a single bundle and put it across his shoulders.'[46]

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[44] Fotopoulos (1997) 196–197, n. 331 linen and wool screen curtain, 1.05 by 0.86 cm

[45] Bénazeth, Durand and Rutchowskaya (1999) 146. For examples of Coptic hangings, see Lorquin (1999); *Koptische Kunst* (1963); Schrenk (1993).

[46] Greg. Tur. *Virt. Jul.* 20: *(super cancellum beati sepulchri cursu prosilit rapido) detractamque a summo unam gemmis corruscantibus crucem ad terram deiecit, collectique villolis ac palliolis de circuitu parietum pendentibus, unum voluculum facit, impositumque umeris* (transl. Van Dam (1993) 177). Duval (2002) 45 suggests that the curtains were rather hanging from rods placed between columns, but there is no mention of columns in the text.

The inventory also mentions iron rods, which may have been used to hang curtains. Depictions of such rods are not infrequent on mosaics: they hold the curtains hanging between columns in the mosaic of Theodoric's palace in S. Apollinare Nuovo in Ravenna. The rods were located under the capitals. From mosaic depictions of churches, we can see that curtains adorned doors, sometimes windows, and inter-columnar spaces.[47] In the Vienna Genesis manuscript, dated to the 6th c., there is a rod holding a short curtain across the ciborium above the altar.[48] Some surviving curtains retain elements to tie them to such rods.[49]

Another inventory of church property, also from Egypt, but from a slightly later period (7th–8th c.) offers a relatively important collection of textiles.[50] On 18 fragments of papyrus, a list of 45 books and a list of around 36 objects can be read. Because it is fragmentary, nothing can be said about missing objects, such as patens and censers. The mention of a silk tunic is enough to make P. Van Minnen, the editor, suggests that this was the inventory of a cathedral church. Silk was indeed a luxury in Late Antiquity.[51] Tunics were often made of linen, with the addition of borders, the *clavi*, where silk could be used. Tunics made entirely out of silk were affordable only for the wealthy, such as members of the aristocracy. Some bishops were often rich enough either by birth or through the wealth of their church to afford such tunics.[52] Consistent with the analysis of the silk tunic as belonging to a bishop, the number of books and the presence of gold objects (a spoon and a cross) also point in the direction of an important church.

List of textiles cited on the papyrus fragments:

– 3 small veils [[στιχαρομ]αφορ(ια) μι[κρ(ά)]]
– 1 tiny purple linen covering [[σκέ]πασμ(α) λε[πτουργ(ὲς) ὀθώνι(νον) πο]ρφυρ[οῦ(ν)]]
– 1 white linen covering (styles) [[εἰλ]ητον σκέπασμ(α) [ὀθώνι(νον) λευκ(όν)]]

[47] Ripoll (2004).
[48] Vindob. Gr. 31, fol. 7, reproduction in Mathews (1971) fig. 94.
[49] Durand (2002) 79; Calament (1996).
[50] Van Minnen (1991).
[51] Morelli (2004); Morrison and Cheynet (2002) 851; Mrozek (1980).
[52] Martiniani-Reber (1986) 12–13.

– 1 light-purple (?) linen covering [σκέπασμ(α) ὀθώνι(νον) λ[ευκοβ] λαττι(ον)]
– 1 Isaurian linen covering with a tapestry woven design with… [σκέπασμ(α) [ὀθώνι(νον) ἔχ(ον). […]ρ( )'Ισαυρικ(ὸν) (καὶ) ἔμπλουμ(ον)]
– 1 Egyptian red linen covering with… [σκέπασμ(α) [ὀθώνι(νον) ἔχ(ον). […]ρ( ) ῥούσι(ον) Αἰγίπτι(ον)]
– 1 small rosy linen covering with a black fringe [σκέπασμ(α) μικρ(ὸν) ὀθώ[ν]ι(νον) ἔχ(ον) μαῦρ(ον) ἀκρούλι(ον) ῥοτόφυλ(λον)]
– 1 small…linen covering [σκέπασμ(α) μ[ι]κ[ρ(ὸν)] ὀθ[ώνι(νον)]
– x…coverings
– 1 new covering with a painted design [σκέπασμ(α) ζωγ(ραφητὸν) καιν[ούργ(ιον)]]
– 1 covering with a painted design [σ[κέπασμ(α) ζ]ωγ(ραφητὸν)]
– 1 embroidered covering for a couch [σ[κέπασμ(α)] ἀκκουβιτ(άριον) πλουμαρικ(όν)]
– 1 new transparent and embroidered silk tunic [ση[ρ(ικὸν) κ]ροσταλλ (οειδὲς) στιχ(άριον) πλουμαρικ(ὸν)]
– 1 embroidered curtain with red tassel [καταπέτασμ(α) ἔχ(ον) πόδ(ας) ῥουσί(ους) πλουμαρικ(όν)]
– 2 curtains with a painted design with black tassels [καταπετάσμ(ατα) ζωγ(ραφητὰ) ἔχ(οντα) πόδ(ας) μαύρους]
– x curtains with tapestry woven and painted designs [καταπετάσμ(ατα) ἔμπλουμ(α) ζωγ(ραφητά)]

The first striking element when comparing this with the previous Greek inventory is the number of details provided for the textiles: the material, the colour, the type of design and details about the fringes are provided along with occasional mention of the size. Compared with the Ibion church, this wealthier church owned a good number of textiles used as coverings.

Altars often had two or three altar-cloths of different length and colour superposed.[53] Some of these could end with a fringe. Such fringes are attested on some images of table coverings such as one in the famous *Codex purpureus Rossanensis*, illustrating Pilate's judgment, or the depictions of the altar between Abel and Melchisedech in San Vitale

[53] In San Vitale (Ravenna), the mosaic depiction of the altar has a purple altar cloth falling on 4 sides to the feet of the altar, and a white altar cloth with fringes falling only half way.

(Ravenna).[54] The small rosy linen covering with a black fringe may be an altar or a tablecloth if the word ἀκρούλιον, as Van Minnen suggests, comes from ἀκροῦλος 'woolly' and refers to a fringe. Tablecloths in linen and silk are mentioned in another church inventory, using terms similar to those from domestic inventories.[55]

Many of the textiles in the papyrus fragments inventory are described as painted. Unfortunately, there is no description of the subject or designs, so we must look at textiles preserved in museums to imagine what they could have looked like. Scenes from the Old Testament, such as the stories of Joseph, Adam and Eve, David, Jonas, and Daniel, and scenes from the New Testament, such as the Annunciation, the Visitation, the Nativity, the Last Supper, and numerous miracle episodes, are present on textiles. Depending on their size, some of these pieces are equivalent to an icon, some to a mural fresco.[56] Some may be copies of actual icons. M. H. Rutschowscaya suggests that a tapestry, now in Cleveland museum, depicting the Virgin and child surrounded by archangels Gabriel and Michael, copied a painting.[57] A number of textiles depict praying figures. Most probably funerary hangings, they may have adorned a church or a private house in memory of the deceased.[58]

From the details concerning colours in the Leiden papyrus, we can conclude that this must have been a very colourful church: red [ῥούσιον], pink [ῥοτόφυλλον] (if the word is about the colour and not the design),[59] purple [πορφύρεος], and light-purple (?) [λευκοβλαττιον] are noted for different linen coverings.[60] These are warm colours, and from what is left of either Coptic or Byzantine textiles, we can confirm that reds and yellows dominate, while purple is a sign of luxury.[61] Red and gold are often linked to divine glory, to fire and light, but as

[54] Fol. 8, Rossano, cathedral treasure, reproduction in Durand (1999) 41.
[55] Fournet (2006) 155–65.
[56] Baratte (1985).
[57] Rutschowscaya (2002).
[58] Such is the hanging from the Louvre, inv. E 29307, reproduction and commentary in Bosson and Aufrère (1999) 166, fig. 80; 257–58.
[59] Van Minnen (1991) 65: it seems unlikely that the addition of ῥοτόφυλλον should be interpreted in such a way that the covering showed a rose-petal design (non liturgical Coptic textiles do show garlands of roses from time to time). See for example: linen with green stem and red flower, fonds Gayet, inv. AI 49 621, Lorquin (1999) 18, 60; linen with red flowers and birds, Musée du Louvre, inv. AF 6041, reproduction in Durand and Saragoza (2002) 90–94, 80; Goyon (1996) 19–20 notes the pink colouring of some linen clothes and links it to a parasite of the plant.
[60] Goyon (1996) 13–22.
[61] Cardon *et al.* (2004).

L. James has brilliantly shown, colour symbolism is not fixed in Byzantium, it depends on the subject depicted.[62] Colours were nevertheless important. Late antique churches were far from the sober ideal of Cistercian churches: they were colourful. The impression derived from these inventories of textiles is that altar and table coverings, door-curtains and hangings played an important role in adding colour to the church interiors. Textiles were also an immediate indication of wealth for a stranger. They also played an important role in enhancing the comfort and atmosphere of a church. They excluded flies and draughts, welcomed visitors at the door, covered the altar, and transformed the churches into warmer spaces than bare walls or marbles could offer. Texture played a role in this warmth: some of the textiles were quite thick, such as curtains in the loop weave technique, others were precious gossamer like veils.[63] After studying textile remains from Maximianon, Krokodilô and Didymoi in Egypt, D. Cardon has noted, "*l'étude de tous ces textiles produit une impression visuelle de chatoiement coloré, évoquant une société où la teinture des textiles était un art à la fois largement répandu et techniquement fort développé*".[64] Finally, textiles added to the sensory experience of the churchgoers by catching the odour of incense, making it linger inside the churches.

Incense and Censers

Incense is a neglected aspect in many studies of late antique churches. The presence of incense inside churches is well attested after the end of the 4th c. But identifying objects used to burn incense is not straightforward. Both the words and the objects used as incense burners present problems, providing something of a case study of the difficulties of understanding inventories. If we look at the few surviving church inventories, censers are not often mentioned, even at a date when we know incense was used during the liturgy. The Ibion inventory has no censer, although the list of objects seems quite complete. Was this

[62] James (1996) 103–107.

[63] Durand and Saragoza (2002) 112–13: la technique du bouclé par la trame est attestée en Égypte, depuis l époque pharaonique; aux époques romaine et byzantine, elle reste courante et permet d obtenir des tissus chauds et confortables, adaptés aussi bien à l usage vestimentaire, sur des châles et des tuniques, qu à l usage mobilier, comme tenture, couverture ou peut-être même housse de coussin.

[64] Cardon *et al.* (2004) 102.

Egyptian church deprived of incense? It seems unlikely, since incense arrived from Yemen in Egypt before being redistributed and it was probably affordable enough for an ordinary church.

This apparent contradiction can be resolved if we try to reconsider the objects in which incense might have been burned, and to examine their occurrence in texts, images and archaeology. The 1st c. A.D. writer of the *Book of Revelation* mentions incense burning in *phiale*, round hollow dishes. It is this kind of object that we should be looking for in church inventories, and not swinging censers. Further proof of the danger of searching for formal censers alone is provided by a 3rd c. fresco from Dura Europos. This scene shows women approaching a tomb, and it is best interpreted as the Women at the Tomb. One of the women carries a bowl from which something dark emanates which seems to be the smoke of incense rising in the air.[65] Thus incense was burning in some sort of *phiale* in this 3rd c. painting.

Archaeology suggests that such simple objects might also have been used to burn incense in an ecclesiastical context. In Egypt, 17 bowls on a small foot, decorated both inside and outside with paint, were discovered during the excavation of the Kellia. All but three were dug out of the rubbish dump. The last three came from the level of the last phase of occupation of the south basilica and had been left on the ground. They date back either to the 6th c. or to the end of the 7th and beginning of the 8th c.[66] Their shape suggests that they were cups or incense burners. In fact, the presence of carbonised matter or soot is the best criteria for distinguishing incense burners from other objects of similar shape. Soot helped identify alabaster cups discovered in tombs in Nubia as incense burners.[67] In the absence of carbonised matter, some ambiguity can remain. Lamps and incense burners can sometimes be confused with each other. In Numidia, the exhumation of a late antique Christian basilica near Aïn-Kercha has revealed a broken clay object identified as a hanging perfume-burner.[68] The difference between such an object and a lamp lies in the presence of holes in the sides of the bowl. It is unfortunately impossible to date such a find precisely, since

[65] Dura Europos, Fresco from the House church, before AD 256 (Yale, University Art Gallery).
[66] Egloff (1977) I 157–60; II pl. 33, 84–85.
[67] Emery and Kirwan (1939) 11.
[68] Berthier (1942) 99; 187.

the church was excavated in a slipshod manner, and abandoned soon after its discovery, without further investigations.

Thus there is much evidence to suggest that we may need a more flexible approach in looking for incense burners in inventories. Can we find an object in the Ibion inventory, which might have been used to burn incense? Among the bronze objects, we find one λεβης χαλκ(οῦς), that is, a cauldron of the type offered after sports contests in ancient Greece. The other interesting object is a κοκκουμ(ιον) χαλκ(οῦν). An *ostrakon* found in the monastery of Epiphanius at Thebes also mentions a bronze κουκκούμιον in a list of bronze objects: pots, pans, cauldrons, boxes, etc.[69] The only reference to this word listed in the *Thesaurus linguae graecae* is found in Epictetus, where it is used to give a bath to a child.[70] This implies a big enough cauldron for this activity. One last object in this church inventory is intriguing: κυαθ(ος), which designates a sort of bowl or cup, sometimes used as a measure and mainly for drinks.[71] There is no doubt that incense could very well burn in one of these objects. The κοκκούμ(ιον) χαλκ(οῦν) is probably a bigger object than the Latin *cucumellum* found in the inventory of the church of Cirta, during the persecution of Diocletian, in A.D. 303.

The list from Cirta, recorded in the *Gesta apud Zenophilum*, recalls the *traditio* of Paul, bishop of Cirta. The *Gesta apud Zenophilum* preserves an account of the objects found in the bishop's church.[72] In A.D. 320, Domitius Zenophilus, governor of Numidia, was in charge of judging the participation of Silvanus, then sub-deacon and now bishop of Cirta,[73] in the *traditio* of books and liturgical apparel perpetrated by Paul. He was presented with the list of confiscated objects written at the time of the confiscation. The inventory includes two chalices in gold, 6 chalices in silver, 6 small jugs in silver, one small pan in silver (*cucumellum argenteum*), lamps, torches, candelabra and clothing for men and women. Is the small pan in silver what we are looking for? Since it is made of a precious metal, it seems likely that it was used near the altar and not as a cooking-pot. An object of this kind is depicted on the Riha and Stuma patens, on the floor in front of the altar. It is

[69] Winlock, Crum and Evelyn-White (1926) II 293, n. 549.
[70] Arr. *Epict. diss.* 3.22.71.
[71] Athenaeus reports one other use: buried deep down in a cup (ἐν κυαθῖδι) is a triad of magic spells; Ath. 9.480.
[72] *Acta Munati Felicis* in *Gesta apud Zenophilum*; Opt. *CSEL* XXVI.
[73] Mandouze (1982) 1078–80.

difficult to be sure what its function was, but it could very well be an incense burner.

After a first inventory of the objects had been made, Minutius Felix, the *flamen perpetuus* in charge of enforcing the law against the Christians, ordered bishop Paul to bring whatever objects he might have left behind. His sub-deacon Silvanus brought a *capitulata* in silver and a silver lamp. Augustine tells the story in the *Contra Cresconium*.[74] The French translator G. Finaert translates *capitulata* as if it meant a small silver box.[75] In a 1912 article, H. Leclercq had already suggested such a translation, but with a question mark: "*un coffret (?) d'argent*".[76] For the Blaise *Dictionnaire latin-français des auteurs chrétiens*, the word refers either to a box or to any other vessel in a church inventory, which is far from clear.[77] It is possible that this *capitulata* was some kind of a box, for whatever content was deemed necessary. However, since very few texts mention the word[78] and since the context does not reveal what kind of object it is, it looks like guess work to assume it is a box. Can we extract some information from the word itself? *Capitulata* evokes an object with a small head. Among possible liturgical objects, two types sometimes have the shape of a head: censers and ewers.[79] Ewers were far less numerous than censers; the latter were, in fact, quite common. Censers in the shape of a head are displayed in museums such as the Louvre, or the Princeton Museum of Historic Art or the Royal Ontario Museum of Toronto.[80] Some come from Coptic Egypt, others reveal a Graeco-Roman style. Thus from the intended reference to a head, it is possible to deduce that this object could be an incense burner. It was not brought out with the rest of the liturgical objects, because it was not considered religious but rather a domestic commodity. A 9th c. poem written to the saints of Lindisfarne mentions some *capitella* out

[74] August. *c. Cresc.* 3.29.33.

[75] Finaert and De Veer (1968) 333: une cassette d argent.

[76] Leclercq (1912) 32.

[77] Blaise (1954) 131: cassette ou récipient quelconque (dans l inventaire d une église).

[78] The word is found in the *Acta Munati Felicis* and repeated whenever that text is cited: August. *c. Cresc.* 3.29.33; August. *Ep.* 53.4.

[79] Louvre, AF 11411.

[80] Bénazeth (1992) 97: bronze censer (coptic), Louvre, Paris, AF 867; feminine head (graeco-roman), Brummer Gallery, Baltimore; feminine head (4th or 5th c.), Museum of Historic Art, Princeton; feminine head (Eastern Mediterranean, 5th or 6th c.), Royal Ontario Museum, Toronto. For ancient Roman models, see Gavelle (1962) 572, 586, pl. 153: celtic *ollae* in the shape of a face often dedicated to a Roman god.

of which the smoke of incense rose: '*omnibus hic rutilo capitellis undique cinctum/turibulum pendet fabricatum cominus auro*'.[81] G. Vikan sees in the anthropomorphic incense burner of Princeton a domestic censer, but the Lindisfarne example shows that we should be careful in thinking that such objects could not be used in churches.[82]

A reading of these inventories proves that if we want to find objects in which incense could be burned, it is easy to find them. Cups and pans served as incense burners, providing they could stand heat. Standardised notions of what an incense burner should be, based on medieval models, are misleading. It is revealing that, in church inventories, objects were named following their shapes and not following their possible usage, in a well-established tradition. Everyone probably knew what a *cucumellum* looked like and what it could be used for, so that, whatever new usage was introduced, it would not change its name. Many of the objects in church inventories are given a non-liturgical name. Only later did liturgical objects come to be systematically named according to their precise liturgical function. At an early point in the history of liturgical vessels, objects were given the name they bore in ordinary life, at least in the context of inventories, so that they were easily recognisable by anyone, and their name did not disclose the uses that were made of them in churches. Later, the opposite would happen: the word censer could be used for any object used to burn incense and it does not give us any clue about its precise shape. One objection can be made to the previous explanation. We find censers among the gifts of Constantine to the Roman basilicas as well as among the gifts of king Chosroes II, and they are not called bowls or cauldrons.

The list in the *Liber Pontificalis* does not diverge from the other inventories in the sense that it names the objects following their shapes and not by function. There is, however, an exception with the word used for censer: *thymiamaterium*. The function is provided by the name itself, since *thymiama* means incense. This is a rare word, a transliteration of a Greek term coming from the *Septuagint*. It is not commonly used for censers and it has a strong Biblical flavour. The word is used in the *Vulgate* to refer precisely to the censers of the Jerusalem Temple.[83] For this specific object, the compiler of the *Liber Pontificalis* chose a word

[81] *De abbatibus et viris piis Lindisfarnensibus*; Mabillon (1704) VI 320.
[82] Vikan (1989) pl. 17.
[83] It is used once in the Vulgate (*Jer*., 52, 19) along with the more frequent *thymiaterium*, and in Ambrose, *Ep*., 4, 3; *De Sacramentis*, IV, 1.

slightly different from the usual *thymiaterion*. Was it to show Biblical culture or was it to avoid the imperial connotation of incense offering? If the donation goes back to Constantine, such a reminder might be construed as offensive. Christians had died refusing to offer incense to the imperial image during the Great Persecution. However, it is possible that this choice of word is an attempt at providing Biblical words for liturgical objects, in order to distinguish them clearly from secular objects. The word *thymiamaterium* is found in the *Ordines Romani* of the early Middle Ages, a proof that the attempt was successful among Roman clerics.[84] It is also an illustration of the new tendency to call liturgical objects following their use and not their shape, something which will prevail in the Middle Ages.

We do not know the exact shape of these Roman *thymiamateria*. But since we are dealing with fixed censers and not with swinging censers at this point, it is only reasonable to think that huge basilicas required high footed censers of the 'candelabra type', rather than tiny bowls. It is likely that they were the stable high-footed incense burners known from the Greeks and favoured in Italy since Etruscan times.[85] An object of this type, dated from the 5th c., is visible in the Brooklyn Museum. It has a flaring bowl with ventilating rings, a richly profiled balustrade and a broad tripod base.[86]

There is no validity to the objection that since censers are specifically mentioned in some inventories and not in others, where they are not mentioned incense cannot have been used. We should not infer the absence of incense from the churches whose inventory does not record a *thymiaterion*, a *thymiamaterion*, or a *turibulum*. Incense was burning in different types of objects, depending on the size and wealth of the church. In small churches, a bowl full of incense could surely fill the space with fragrance, but it was not called a *thymiaterion*, since it had another shape, while in major basilicas, standing incense burners with the ability to perfume a greater volume of air were called for.

Movable censers that a deacon could swing became popular objects at the end of Antiquity. They were better suited to perfume the air

[84] *Ordines Romani*, I, 41, Andrieu (1971).

[85] Testa (1989). A beautiful example of this type of object is given in Almagro Basch (1964).

[86] This precise example was not a Christian censer, since it is marked by a menorah, but it has the elegance and the shape appropriate for our *thymiateria*; Vikan (1989) pl. 125. For other examples, see Vikan (1982) 30.

of a church or to honour a particular figure or an object. They are often called *thymiateria*. Many of these, decorated with scenes of the life of Christ, are on display in museums.[87] Their rising popularity shows that churches could now afford and wished to burn incense in specific objects. This does not mean that incense ceased to be burned in clay bowls, but it is likely that these ordinary objects were gradually excluded from churches as insufficiently worthy of God and were increasingly confined to the world of domestic objects. At least, they were not recorded in later inventories. The elaboration of a range of specific Christian censers overshadowed the other objects from which the fragrant smoke of incense could equally have risen. The words used for incense burners and the objects used to burn incense became standardised. By the early seventh century, the swinging of censers was a familiar scene inside churches.

Conclusion

Can we reconstruct the contents of a church with the help of inventories? The answer is not straightforward. Inventories are precious documents giving us insights into the world of objects present inside a church. They allow us to reconstruct something of the atmosphere of many churches, aspects of their ritual and social practices, and also to identify clear differences in status between different foundations. They do not however give a comprehensive list of objects and often only record precious objects. It is also sometimes difficult to link obscure terms to meanings in other texts and to real objects.

To have a better view of the objects inside late antique churches it is necessary to turn to other types of source: notably buried hoards and the stratigraphic archaeology of church sites. Archaeological excavation of well-preserved churches sites also produces large numbers of associated objects, particularly in the East and South Mediterranean, with desert monasteries being particularly rich. On such sites, abandonment and especially destruction deposits produce a record of many mundane objects, shared in part with domestic areas, that even poorer churches might omit in their inventories. They also produce lamps and lampstands, and, from dry areas, curtains, wooden furniture, flasks,

[87] Richter-Siebels (1990).

and spoons, as described in the bibliographic essay on religious space in this volume.

This article has tried to understand inventories by referring to individual finds on occasion, but this is to avoid touching on a more difficult issue: how to combine the evidence of inventories with stratigraphic artefact assemblages to reconstruct the total probable contents of a church. Here, neither inventories nor stratigraphy can provide a total picture. Inventories are probably generally biased in favour of the richest items, whilst archaeological sites often reflect the opposite tendency: frequently revealing only those objects which were considered of little value at the time of the abandonment of a structure. However, archaeology reveals something of the way that objects were treated over time, with record of use, repair, replacement or ritual deposition.

In order to complete the picture, it is necessary to combine literary texts, such as *ekphraseis*, miracle stories or sermons, with inventories and archaeological finds. But whilst the latter usually privilege high-status contexts, both archaeology, and some inventories, document quite ordinary churches. Their combination can allow us to approach something of the everyday atmosphere of many churches of the period. This is obvious from the detailed inventory of the village church of Ibion, which provides a list of objects which even the most ambitious archaeologist might not hope to recover. Yet, the combination of these very different sources is far from straightforward: for many simple objects it will perhaps never be clear that the local words found in inventories can be matched to what is found on site: a degree of ambiguity must ever remain.

Appendix: The Inventory of Ibion

This inventory provides us with a list of objects comprising the treasure of an Egyptian village church of 5th to 6th c. date. Preserved on papyrus and written by the archdeacon Elias, it lists objects belonging to the church of Apa Psaius, located in the village of Ibion.[88] It is extremely useful, because it is obviously a list meant to cover all types of objects and it includes ordinary objects of relatively little value (boxes, a knife, a ladle, a wooden tray). The translations are hypothetical, as are the

[88] P. Grenf. II.111 (ed. and transl. Hunt and Edgard (1970) 432–34).

uses that we can imagine for many of these objects. We must be cautious before fixing the proper use for each object too strictly. If it seems clear that the chalices, paten and altar served during the celebration of the Lord's Supper [ποτήρ(ια) ἀργυρ(ᾶ), ξέστ(ης) ἀργυρ(οῦς), βω-μὸς χαλκ(οῦς)], what was the use of the marble table? Was it an altar or a table for the offerings? This remains unclear since the list provides a specific entry for a bronze altar. What are we supposed to understand concerning the 23 linen table- cloths? Were they used as a reserve for the altar cloth, or were they intended for another table? Some of the objects could have multiple functions, for different ritual celebrations. The bronze basin [λουτήρ(ια) χαλκ(ᾶ)], for example, could have been handy for baptismal ceremonies or for the feast of the Epiphany, during which quite a large quantity of blessed water was required. Is this basin comparable to the 'saucepans' shown in front of the altar with a chalice on the paten of the 6th c. Riha treasure? Depictions of liturgical scenes are another source to consider when interpreting objects cited in inventories.

– 3 silver chalices [ποτήρ(ια) ἀργυρ(ᾶ)]
– 1 silver paten [ξέστ(ης) ἀργυρ(οῦς)]
– 2 hangings [καταπετάσμ(ατα)]
– 1 iron rod [ῥαβδ(ος) σιδηρ(ᾶ)], 1 small iron rod
– 1 marble table [τράπεζ(α) μαρμαρ(ᾶ)]
– the 3 bronze feet of the table [τρίπους χαλκ(οῦς) τῆς τραπέζ(ης)]
– 23 linen table cloths [μαμπ(άρια) λινᾶ τῆς τραπέζ(ης)]
– 5 woollen cloths (table cloths?) [μαμπ(άρια) ἐρεινᾶ)]
– 6 door-curtains [οὐηλόθυρα], one other, old
– 1 hanging woollen curtain [οὐηλάρ(ιον) ἐρειν(οῦν) κρεμ(αστὸν)]
– 1 hanging coverlet [στρῶμ(α) κρεμαστ(ὸν)]
– 4 bronze lampstands [λυχνίαι χαλκ(αῖ)]
– 2 iron lampstands [λυχνίαι σιδηρ(αῖ)]
– 1 bronze altar [βω-μὸς χαλκ(οῦς)]
– 1 bronze basin [λέβης χαλκ(οῦς)]
– 1 bronze jar [κοκκούμ(ιον) χαλκ(οῦν)]
– 1 bronze tub (font?) [λουτήρ(ια) χαλκ(ᾶ)]
– 6 hand-lamps with 6 lamp wicks (nozzles?) [χειρολυχν(ίαι)ς μύξ(αι)ς]
– 4 lamps in the shape of a boat with 4 lamp wicks (nozzles?) [πλοιάρ(ια) χαλκ(ᾶ) δ μύξ(αι) δ]
– 21 parchment books [βιβλία δερμάτι(να)]
– 3 papyrus books [χαρτία]

– 1 (measuring?) cup [κοτύλ(η)]
– 1 ladle [κύαθ(ος)]
– 1 knife [μάχαιρ(α)]
– 1 bier [κραβάκτ(ιον)]
– 1 wooden tray [μαγὶς ξυλ(ίνη)]
– 2 leather cushions [τυλάρ(ια) δερμάτ(ινα)]
– 1 object in odorous cedar (mortar?) [θυία{ν}]
– 3 wooden armchairs [καθέδρ(αι) ξυλ(ίναι)]
– 2 benches [σεμψέλλ(ια)]
– 1 triply (woven?) cloth [ἱστ(ὸς) τριύφ(αντος)]
– 1 box (cupboard?) [ἀπαιοθήκ(η)][89]
– 1 bronze (flask?) [λύκηθ(ος) χαλκ(ῆ)][90]

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[89] Liddell and Scott (1996) 175: cites the papyrus but offers no translation of the word and writes dubious sense.

[90] Λύκη is a word imagined by Macrobius with the meaning of light. One could envisage that it refers to a type of lamp.

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FURNITURE, FIXTURES, AND FITTINGS IN CHURCHES: ARCHAEOLOGICAL EVIDENCE FROM PALESTINE (4TH–8TH C.) AND THE ROLE OF THE *DIAKONIKON*

Vincent Michel

Abstract

Studies of church architecture have often been unable to assign convincing functions to annexe rooms. This article attempts to address this problem by investigating the literary, epigraphic and archaeological evidence for such spaces, focusing particularly on western Palestine. This mainly concerns the role of a room identified from epigraphy as the *diakonikon*. Examples of such rooms with archaeological traces of furniture are explored, including installations for relics. Artefactual and textual evidence is also considered, revealing the changing function of these rooms, in terms of the preparation of the Eucharist, the storage of relics, the keeping of treasures and other items associated with the daily functioning of the church.

Introduction

The aim of this study is not to establish a detailed inventory of all those churches in which furniture has been found, but rather to focus specifically on a handful of sites from which furniture was recovered from ecclesiastical contexts in Byzantine western Palestine (fig. 1), and to provide a detailed treatment of the different kinds of objects and their contexts. The paper will begin with a consideration of the individual artefacts themselves, and will then move on to their specific contexts (secondary tables, cupboards, and niches). Finally, it will explore some surrounding issues: the location of the artefacts, the means by which they were stored, their display function, the ways in which they were used, and the essential role of a special room, the *diakonikon*. Sometimes the location in which an object was discovered can reveal something about its function; equally, the unearthing of a specific artefact can also inform us about the nature of the place in which it was found. In this specific realm of study, an approach which uses evidence from archaeology,

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Fig. 1 Map of Palestine (F.-M. Abel Géographie de la Palestine vol. 2 carte X).

epigraphy, and textual sources together is particularly important: it allows us to identify not only the precise nature and function of many of the objects in question, but also to identify the rooms and spaces in which they were found.

Like any study of ecclesiastical material from Palestine, this has its own complex problems: firstly, dating is often difficult, not only for the construction of a building, but also its phases of restoration and eventual dereliction; secondly, the state of preservation is often poor, a problem which is heightened in the case of internal church fittings, as artefacts and furniture have so rarely survived in complete condition;

thirdly, early excavations have often left us with precious little supporting documentation, and numerous objects appear in collections or publications with the *caveat* 'provenance unknown'.

The basilica church consists of a large hall ending in an apse on its eastern side; the apse is either on its own, or flanked by two rectangular rooms, two small lateral apses, or one of each. The large hall is commonly divided into three naves by columns or pillars, supporting either the roof or a gallery. In the first half of the mass, the *ambo*, or pulpit used for reading the scriptural texts of the liturgy (the Liturgy of the Word) concentrated the attention of the faithful, whilst afterwards, in a second half (the Eucharist), the focus became the altar, located in front of the apse on a raised area called the *bema* or the *presbyterium*; however, it appears clearly that before, during and after the mass, several liturgical or non-liturgical actions could unfold away from these two topographical poles, in annexe-rooms. The annexe rooms built against the outer walls of the church often acted as secondary foci, because of their crucial liturgical functions. Of all the annexe rooms, the most important is known as the *diakonikon*, which might be translated as 'the room of the deacon' or 'the room for the service', and was likely more than simply a sacristy.

Research on the ground and the analysis of literary and epigraphic sources reveals an important contrast between annexe rooms identified by inscriptions and the majority of the other rooms that cannot be given a name. The majority of the annexes rooms remain without precise designation, because neither installation, nor the form, nor the site, make it possible to qualify them, and yet the list of the spaces built around the church is large. They can have a ritual function, like the chapel annex (funerary or commemorative), the baptisteries, the vaults with the relics, a non-ritual function like the *diakonikon* and a whole panel of rooms with domestic and utilitarian functions (offices, reserves, residences, rooms for reception). The only names preserved of these annexes in epigraphy and other texts are the *diakonikon*, the *photisterion* (baptistery) and the *eukterion* (chapel).

In most of the typical churches in Palestine, the *diakonikon* cannot be identified as one of the two small rectangular service rooms flanking the apse, which could be entered from the eastern end of each of the aisles.[1] The situation in Palestine is different to Syria where we find the *diakonikon* and the *martyrium* generally close to the main apse. But, from

[1] Duval (1994) 157.

the end of the 19th c. until recently, scholarly consensus held that, in Palestinian churches, the room on the south side functioned as the *diakonikon*, the service room for the deacons, and that on the opposite side was the *prothesis*, a room used for the preparation of oblations.[2] Yet this precise nomenclature was in fact wholly inappropriate and anachronistic for Byzantine Palestine: the terminology derives in fact from the Constantinopolitan liturgy established in the 14th c. (the *De Officiis* of Pseudo-Kodinos, dated to 1350–1360).[3] Indeed, in cases where excavation has been extended into the areas surrounding the main body of the church, further external structures have come to light, which were added onto the central structure, adjacent to its northern and southern walls. These extensions would have contained rooms in which baptismal rites were performed, where the offering and liturgical objects were stored and prepared, and where the clergy lived or managed their Christian community. The only room to have been regularly given a distinctive name was the *diakonikon*, which alone appears on mosaics decorating these spaces. From the study of texts it appears clearly that the *diakonikon* played an essential role in the smooth functioning of the liturgy in a church. In view of both of these observations, it seems that this space was pre-eminent over other annexe-rooms.

Epigraphy and texts attest that the name *diakonikon* describes an external room, either on the northern or southern sides, which was directly accessible from the church (fig. 2).[4] The room had multiple functions, regarded as place of preparation, arrangement, conservation and setting in a sure place, which thus required particular installations: one or more cupboards and one or more tables, of which one finds little trace at the time of excavations. From both archaeological and textual approaches, we can now affirm that the *diakonikon* holds a distinctive place in the course of the liturgy as well in the everyday life of the Christian community using the building.

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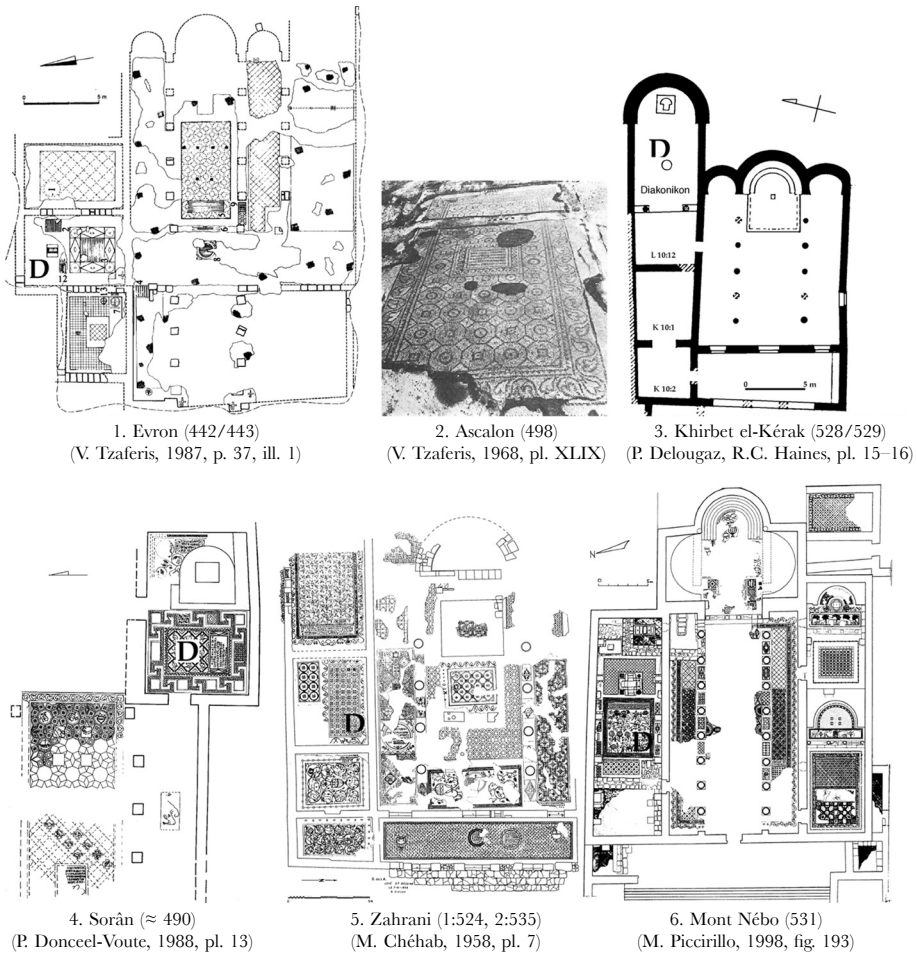
[2] Freshfield (1873) 383–92; Aronstham (1997) 49–50; Ovadiah (1999) 428–37; Tzaferis (2001) 16–17, fig. 15.

[3] Sym. Thess., *De sacro Templo*, 137; Babić (1969) 63.

[4] Texts: Leroux (1913) 123; Cyr. Scyth., *v. Sab.*, 102. 3–7, 22–27; Steph. Sab., *Passio XX Martyrum Sabaitarum*, 47. 173; Blake (1950) 27–43; Epigraphy: Evron (Tzaferis (1987) 36–51); Ascalon (Tzaferis (1968) 414–15; Tzaferis (1971) 241–44); Khirbet el-Kérak (Delougaz and Haines (1960) 53); Horvath Hanot/Khirbet el-Khan (Gibson, Vitto and Di Segni (1998) 332); Sorân in Syria (Balty, Chéhadé and Van Rengen (1969) 28, no. 8); Zahrani in Lebanon (Stern (1965) 31–33; Chéhab (1957–59) 81–106, pl. XXXVI–LVIII, fig. 6, plan no. 7); Mount Nebo (Di Segni (1998) 430).



1. Evron (442/443) (V. Tzaferis, 1987, p. 37, ill. 1)
2. Ascalon (498) (V. Tzaferis, 1968, pl. XLIX)
3. Khirbet el-Kérak (528/529) (P. Delougaz, R.C. Haines, pl. 15–16)
4. Sorân (≈ 490) (P. Donceel-Voute, 1988, pl. 13)
5. Zahrani (1:524, 2:535) (M. Chéhab, 1958, pl. 7)
6. Mont Nébo (531) (M. Piccirillo, 1998, fig. 193)

Fig. 2 The Location of the *Diakonikon.*

The Archaeological Evidence

Archaeologists are only very rarely able to discover and excavate church furniture or objects used in liturgical practice, as they have been preserved only very occasionally. In general, at the sites considered by this paper, almost nothing has survived from inside any of the rooms flanking the apse of a church. Of the few artefacts that have been recovered from these particular contexts, the most common survivals are those relating to installations for the veneration of relics. For example, in the south-eastern room of the south church at Oboda in the Negev, a reliquary

was discovered, alongside a circular plate made of marble, which was identified as a paten.[5] In the north church at the same site, each lateral apse of the building featured a semi-circular niche; the niche of the northern apse featured a reliquary measuring 50 × 32 cm, which was apparently *in situ*.[6] More recently, excavations in the north-west church at Susita-Hippos (north-east of Palestine) have provided a clear example of the position of reliquaries within the context of ecclesiastical architecture.[7] Here, a concentration of broken pieces of church furniture was discovered on the floor of the northern apse, and was suggestive of the wealth and opulence of this particular church building.

Although the collapse of the church structure itself appears to have preserved the objects *in situ*, it also appears that they were already broken when the building collapsed. These furniture pieces included 7 marble table legs, one limestone table leg, and part of a white marble tabletop. The limestone table leg was broken, lacking both base and capital, although the lower part of the leg was found *in situ* in the church's northern apse and seems to have been originally used there. One further piece of furniture was a small, undamaged reliquary, made from yellowish-white marble, which was found in several broken fragments; it had a grey marble lid, made to fit the exact dimensions of the box, and its interior was divided into three rectangular compartments of identical dimensions, one of which contained a small intact glass bottle with the remains of a bone inside.

Inside the south-east room, close to the central apse, two further reliquaries were found, one underneath the other, and again apparently preserved *in situ*. The lower of the two was made from soft pink limestone and contained three compartments, each of which originally had their own lid; the central compartment was circular, and the two flanking compartments were rectangular in shape. The entire reliquary was inserted—sunk into—the mosaic pavement. The second reliquary, fashioned from marble, was shaped to resemble a miniature sarcophagus, and again comprised of three separate compartments. The lid, which had 4 corners serving as *acroteria*, was perforated by a central hole, which was plugged by a bronze pin, a device apparently functioning as a means by which to touch the relics contained within. The site is

[5] Negev (1997) 135, 143, fig. 221.
[6] Rosenthal-Higgenbottom (1982) 44–45, figs. 5–6.
[7] Segal (2000) 12–13, fig. 20; Segal (2001) 16–17; Segal (2002) 5–8; Segal (2003) 13–17.

of particular interest not only because it reveals two different types of reliquary, but also because it preserves valuable information about the placement and position of them in the context of the church's architecture, both in the apse and in the flanking rooms.

Liturgical material

It is now possible to extend the study, and go on to consider some specific types of object that have been uncovered during excavations in church annexe rooms: especially church vessels, both domestic and liturgical. Among the latter category, of particular interest are chalices, the cups used in the celebration of the Eucharist in which wine and water were mixed in the annexe-room prior to being brought to the altar itself. Chalices have been found fashioned from ceramic, metal, and glass, but they are very rarely excavated *in situ* from their original location, because, we might imagine, the clergy were usually responsible from removing them from a church that had been destroyed or abandoned. Of those chalices from the region under consideration in the present paper, there are several that might be mentioned: a pottery chalice found in Beth Shean (h. 6 cm); a glass chalice from Khirbet el-Kerak (Beth Yerah) (h. 10 cm);[8] and a ceramic chalice, uncovered *in situ*, from the service room behind the apse of the chapel in *Dominus Flevit* in Jerusalem.[9] From this latter room also came a bread stamp which was found directly on top of the floor level;[10] this is a find that could well be associated with an oven discovered in the south-west corner of the room, and which was probably used to cook Eucharistic bread. This entire installation was dated to the 7th c., a time when Eucharistic bread was prepared not by the faithful but instead by the clergy themselves, in accordance with Egyptian[11] and Chaldean tradition.[12]

In the northern church at Rehovot, two marble fragments from two different types of reliquary lids were discovered:[13] the first belonged to the miniature sarcophagus type, and was discovered out of context in the cistern of the atrium; the second came to light in a small annex

[8] Israeli and Mevorah (2000) 84.
[9] Bagatti (1955–56) 240–70; Bagatti (1968) 24, fig. 122.
[10] Bagatti (1955–56) 256, fig. 9.
[11] Riedel and Crum (1904) no. 34.
[12] Connolly (1911–13) 36.
[13] Tsafrir (1988) 132, figs. 209–11.

room in the south-west of the church, and consisted of a concave disc (diam. 12.5 cm) featuring a square hole (2.3 × 2.3 cm) in its centre.

When we compare material derived from archaeological excavation with evidence from textual sources, we must always remember an important distinction. There is an entire class of material for which our only evidence is textual sources, and of which no material trace remains: such as the liturgical clothing for priests, or the altar cloths that we read were called *haplômata* in Greek, in the 5th c.[14] There are several references to this latter in a variety of texts: Cyril of Scythopolis relates how Thomas the monk went to the patriarch of Alexandria in order to obtain altar cloths for the monastery-church of Saint Euthymius;[15] Theodore of Mopsuesta mentions deacons spreading cloth on the altar, which were used as sheets for burial;[16] and Anastasius of Sinai mentions two altar-cloths covering a marble altar.[17] Also, there is some evidence for a liturgical fan (*flabellum* in Latin), which was apparently used from the 4th c. onwards (*CA*, VIII, 12, 3), in order to repel insects or other impurities from coming into contact with the chalice or paten during the mass;[18] nothing resembling this object has been found in Palestine, although we do know something of the *flabellum* of Stuma in Syria.[19] Similarly absent from the archaeological record of Palestine are those diptychs, attested from elsewhere, upon which were inscribed the names of donors and holy men (although one example has been found at Soluch in Cyrenaica),[20] and any example of a basin used by the priest during the liturgy to wash his hands, which is itself an object difficult to identify.[21]

Non-liturgical material

Other artefacts and objects that are recovered through archaeological investigation have proven substantially more of a challenge to identify and interpret. In cases when uncertainties arise, reconstructions of an

[14] Bagatti (1968) 218–19.
[15] Cyr. Scyth., *v. Cyriac.*, 226. 2.
[16] de Mopsueste (1996) 256–57.
[17] Binggeli (2001) 217, 528.
[18] *Constitutions Apostoliques*, 8. 12, 3 (transl. Metzger (1985) 80); Cyr. Scyth., *v. Euthym.*, 45. 5–25; Debie, Couturier and Matura (1996) 256–57.
[19] Ebersolt (1911) pl. 408, fig. 1.
[20] Oliverio (1961) 48–51, n. 28.
[21] *Constitutions Apostoliques*, 8. 12, 3–4 (transl. Metzger (1985) 80).

object's use are often merely hypothetical. A small glass or ceramic jug, for example, is equally likely to be used for pouring out water or wine in the context of the Eucharist, as for the ritual washing of the priest's hands during the service. Similarly, the large ceramic containers that resemble kraters, many of which have been excavated from the annexe-rooms of churches, can be associated with both liturgical and non-liturgical uses. This problem of identification is only heightened when an ecclesiastical structure is reused for secular or domestic purposes later in its lifespan (generally speaking, it is always safest to assign material culture to the very latest form of occupation on a site). There are a series of sites from which apparently non-liturgical vessels have been excavated from ecclesiastical contexts. At *Dominus Flevit*, two jars (one large and one small) were discovered lying on the floor of the secondary chapel.[22] At Bata-Karmiel, there is a paved room that adjoins the southern wall of the church[23] in which excavators discovered a very large quantity of pottery sherds, specifically of jars and kraters. At Karkur (north of Beer-Sheva), the north aisle of the church featured a baptistery/chapel at the western side, and two rooms towards the east that opened directly onto the north nave of the church. The excavation of the eastern-most of these rooms again uncovered a large quantity of jars, pots, plates, bottles, and lamps, all of which could be very generally dated to the 6th–7th c.[24] It is probable that this was a storage area, and the vessels held a variety of different liquids, including water, wine, and oil; the plates may have functioned as patens, or may have been used in *agape* meals in the community, or even, perhaps, as collection plates. At the church of Jabaliyah in Gaza, the room behind the baptistery contained fragments of two jars which had been directly inserted into the ground.[25] Their use is uncertain: they may have functioned as storage for water used in the rituals of baptism and the Eucharist.

More precious, non-liturgical finds have come from the annexe-rooms of two churches. On the south side of the chapel in the 6th c. monastery of Beth Shean, a gold bracelet was discovered, alongside a hoard of 10 gold coins, all from the Constantinopolitan mint and all dating to the reigns of Maurice (A.D. 582–602) and Heraclius

[22] Bagatti (1955–56) 245–55.
[23] Yeivin (1992) 119.
[24] Figueras (2004) 39–42.
[25] Humbert *et al.* (2000) 122–26.

(A.D. 613–630); among the artefacts uncovered in the north-west corner of the same room was a gold chain with a filigree pattern.[26] The southern wing of the north-west church at Hippos is made up of a long hall which was divided into three separate spaces; from the largest of the these three, at the eastern end, came an extremely rich cache of finds, significant among which were iron agricultural tools (sickles), bronze vessels (including an Umayyad decanter) and a series of ceramic vessels. The supposition is that not only was this the room that was used as the church's *diakonikon*, but that it continued to be in use in the 8th c.[27]

Ultimately, our conclusion must be that a vessel can only be assumed to have had a liturgical function if it is possible to ascertain two things: firstly, that the room in which the artefact was found communicates directly with the main space of the church, and secondly, that the date of the artefact itself corresponds with a date at which the church was known to be in use. If these two assumptions can be shown to be true, then it is further likely that the room from which such artefacts are recovered probably functioned as the *diakonikon*.

The Cupboard (fig. 3)

In order to garner as full an understanding of the liturgical furniture as possible, it is crucial that attention should not be focused on the vessels alone; considerations of these particular contexts must extend to the cupboards that housed, and the tables that supported, the liturgical materials themselves. Naturally, the presence of a liturgical cupboard or niche can only be established when a structure's walls have been preserved up to a sufficient height so as to permit them to survive. Furthermore, we cannot expect that wooden cupboards affixed to the superstructure would have left any archaeologically-recoverable traces.[28] Cupboards have been identified across the range of annexe-rooms, both from those closest to a church's apse, as well as from those rooms that were external to the church building, although they are generally more common in the latter.[29] In the case of the former, liturgical cupboards seem to commonly occur in the wall that directly adjoins the apse,

[26] Fitzgerald (1939) 4, pl. III, figs. 1–2.

[27] These were the conclusions of the excavator, Dr. Mariusz Burdajewicz of the University of Varsovie; M. Burdajewicz (pers. comm.).

[28] Nau (1902) 31–32.

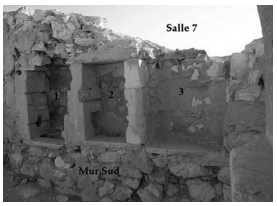
[29] Duval (2003) 35–114.

Small size

South-East Room
Northern Church of Rehovot

External Room South-East
Western Church of Mampsis

Medium size



South-West External Room (n° 7)
North-West church of Nessana

(H. D. Colt, Nessana, pl. VIII 2°)

(S. Batz, 2002, p. 50, fig. 13)

Church of Beit Sila

(A. Negev, Oboda, ph. 168)

South-East Room
North Church of Oboda

Large size

External North-East Room
Church of the Cardo, Petra

South-East Room
Central Church of Rehovot

Fig. 3 Cupboards.

and only very rarely in the eastern wall of the annexe-room, which was seemingly more commonly reserved for the semi-circular niche associated with relic cult.

Generally, it is possible to distinguish three different types of cupboard. The first kind, examples of which have been found at Elusa, in the northern church at Oboda, and in the north-west church at Hippos-Susita, is generally set-in between 1–1.3 m above the floor-level; its dimensions are usually d. 50 cm × w. 45–65 cm × h. 60–100 cm. The second kind of cupboard usually shares most of the dimensions of the first, but is substantially less tall. The third type are those which begin flush with the floor-level, such as the examples found in the Petra church in the north of the *Cardo*,[30] and in the central church at Rehovot-in-the-Negev. Any one room might have several cupboards, all of which might vary in size, as was the case in the western church at Mampsis.[31]

These cupboards are most commonly constructed from cut stone; the interstices between the stones apparently corresponded to the racks or shelves which generally filled the cupboard's interior space. These could be made from wood, from stone (as was an example from Nessana),[32] or from marble (as at Beit Sila).[33] The height of the shelving obviously therefore varies with the size of the stones used in a cupboard's construction, but on average they ranged between 30–60 cm, depending on the size of the cupboard itself.

Very little has been excavated from inside the cupboards themselves: it is likely that immediately prior to the abandonment—or the destruction—of a church building, any particularly precious objects were removed from their storage contexts by members of the clergy. In the context of this study, it is important to consider the role of the cupboard in its spatial context, especially as there is necessarily a connection between the contents of a space like this, and the material form the space assumes.

The cupboard discovered at the site of Beit Sila was situated in an unusual position—at the extremity of the nave in the wall closest to the entrance of the north-east room—from which came a plate (diam.

[30] Fiema, Kanellopoulos, Waliszewski and Schick (2001).
[31] Negev (1988) 62–63, pl. 13.
[32] Colt (1962) 39.
[33] Batz (2002) 41–43, fig. 4.

26 cm) which was interpreted by its excavators as a paten.[34] Texts and documents relating to the performance of the liturgy have been found in only three locations in Palestine. The first of these was from the inside of a cupboard in a room in the south wing of the north-west church at Nessana.[35] Here, excavators uncovered papyri relating to literary, theological, and legal matters, amongst which were 11 books or fragments of books including a Greek dictionary to the *Aeneid*, several chapters of the Gospel of John, the Acts of Saint George, and the apocryphal letters of Abgar to Christ and Christ's reply.[36] The 195 non-literary documents and fragments could be dated to A.D. 512–689, and they related to most spheres of life: financial contracts, marriage and divorce, division of property and inheritance, bills of sale, receipts of various kinds, and letters concerning both church matters and military matters. Secondly, a further cache of 6 papyri came from the same city, found in the church of the *Theotokos* and dated to the period A.D. 537–593.[37] The third find came from an external annexe-room to a church in Petra,[38] and was dated to A.D. 537–593. The Petra and Theotokos *papyri* do not concern liturgical matters, but instead provide information about the legal aspects of economic transactions, social contracts and disputes, and tax responsibilities, illustrating the central role that the ecclesiastical hierarchy played in the lives of the community.

At the northern church at Oboda, a large paved annexe-room, which could be entered from the west end of the church's southern aisle, contained two cupboards, one built into the south wall, and the other into the west.[39] On top of the paved floor, two reliquaries were found by excavators, and in general it looks as though it was this room that functioned as the building's *diakonikon*.

In the north church at Nessana, a marble reliquary was discovered in a small room that was located in the north-western part of the basilica.[40] The cupboard found at the site in Beiyudat was similar to a small niche which had been built into the south wall closest to the room's entrance, and there too a very small reliquary was discovered

[34] Batz (2002) 48.
[35] Colt (1962) 39.
[36] Casson and Hettich (1950).
[37] Kraemer (1958) 3.
[38] Frösén, Arjava and Lehtinen (2002).
[39] Negev (1997) 110, 115–16, figs. 166–67.
[40] Colt (1962) 37.

in the bottom of the cupboard.[41] In the church at the south complex at the site of Oboda, the ecclesiastical structure communicated directly with a single annexe-room to its north. This room, when excavated, was found to contain little furniture: only a rectangular cupboard set into the eastern wall, and a large circular basin in the north-west corner (diam. 45 cm × d. 50 cm) which was cut into the floor of the room and covered by a stone slab.[42]

Textual sources inform us about the general nature of material culture used in the celebration of Christian liturgy and ritual, including relics, a wide variety of sacred vessels, and other objects such as censers, strainers, and fans. To this list of important portable objects that require storage, we might add the church's treasury, which was probably not only kept in gold and silver coinage, but also in pieces of jewellery as well (as appears to have been the case in the monastery of Our Lady at Beth Shean). Cyril of Scythopolis tells the story about a great quantity of money which was stolen from the cupboard in the *diakonikon* of the monastery of Saint Euthymius in the Judean Desert.[43] Also requiring storage space would have been the liturgical clothes used by the clergy, which presumably would have been folded and kept safe in cupboards too. John Rufus tells the story of a miraculous revelation where Christ appears to the lector of the basilica of the *Probatique* in Jerusalem, angry that upon entering the church's *diakonikon*, he found that the liturgical vestments were dirty, when they should have been washed, perfumed, and left inside the cupboards.[44] There is some comparable evidence from Egypt, which suggests that liturgical vestments were to be placed upon the old altar-table inside the *diakonikon*.[45] There may be some concordance between texts and archaeology in this case, as no less than 6 cupboards were found in the north wall of a northern annexe-room in the basilica of the *Probatique*.[46] In general, we can imagine a very definite material link between the dimension of the archaeologically-excavated cupboards, and the amount of objects and vessels that the church needed to store: the wealthier, larger, and

[41] Hizmi (1990) 257, fig. 17.
[42] Negev (1997) 142, figs. 218–20.
[43] Cyr. Scyth., *v. Euthym.* 68.31–70.26.
[44] Jean Rufus, *Plérophories* 18 (ed. Nau (1899) 18–20); Clermont-Ganneau (1900) 228, par. 18.
[45] Wipszycka (1972) 100.
[46] Alliata (1992) 28, fig. 28.

more important a church community was, the larger its cupboards are likely to be.

The Secondary Table

The next type of secondary furniture to be discussed is the church's secondary tables (in this sense, the term 'secondary' is used to distinguish a category of furnishing that is separate from the church's central table, the altar itself, which would have been located in either the apse or the *bema*, and is an object whose nature has already been thoroughly investigated). No intact tables have been excavated, only fragmentary remains in limestone or marble, but often through careful excavation the original location of such objects can be ascertained, via the imprints they left on floor surfaces or mosaics.

Generally, a secondary table might be located in three different places inside a church. First, such an object can be found in the area of the *bema* itself, usually on the western side of the chancel. At Hesheq, liturgical tables were found on either side of the *bema* and were attached to the screen; fragmentary remains (including one fully-intact leg on the northern side) showed that they were made from soft limestone, and would have been approximately 1 m tall, with table-top dimensions of 24 cm × 85 cm × 17 cm.[47] Such tables could also be in the nave of the church, but were always near the *bema* (as at Shavei-Zion[48] and Naharya).[49] They might be square in shape, resting on two legs and attached to the screen, and were always smaller than the altar-table. The occasionally-used term 'offertory table' seems inappropriate to describe them for a number of reasons: it is not a term that appears in the primary textual sources at all; there would not have been a procession of the faithful in the church; and the *diakonikon* was probably more likely to have been used in conjunction with the offerings. Neither is the structure to be confused with the church's pulpit in any way, because at certain sites (such as the church of the Lions at Umm er-Rasas), the table was connected to the *ambo*. The term best used to describe such pieces of furniture is 'credence table' (the *Chronicon Paschale* for the year 624 mentions such a word—*paratrapezion*—in relation to Constantinople),[50]

[47] Aviam (1993) 55, 57–58.
[48] Prausnitz (1967) 18–26.
[49] Dauphin and Edelstein (1984) 49–51.
[50] Dindorf (1989) 167–68.

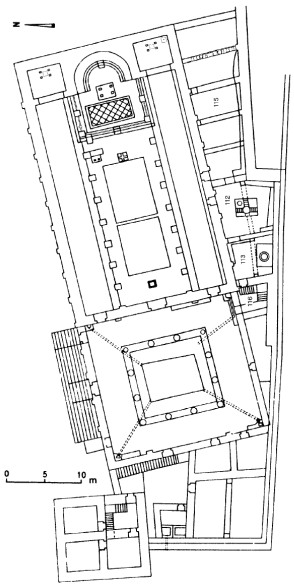
and it was most likely used during the communion ritual itself, as a place to rest the liturgical vessels.

The second location for secondary tables is inside the internal rooms of a tri-partite eastern end (as at Mampsis-East,[51] Ein Hanniya, Hesheq, Oboda-South, and Beer Shema)[52] (see fig. 4) or a tri-apsidal eastern end (as at Nahariya and Susita-Hippos).[53] In the case of the former, the rooms always interconnect with the central apse via an archway, and thus are not closed rooms. The function of the table in this case will be further explored below. The third position of such secondary tables is in an annexe-room, a *diakonikon* (as at Shavei-Zion),[54] or a secondary chapel (as at Kursi[55] where the location of the table could be ascertained as it was the only place in the room where mosaic had not been laid). In a chapel, the table was usually acting as an altar, being placed directly in the middle of the *bema* and protected by a chancel-screen, as was the case at Kursi; in the *diakonikon*, the table was usually up against one of the room's 4 walls.

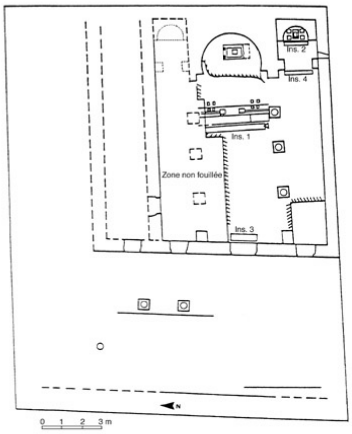
Places of Storage and Places of Display

We can now move on to consider the rule of reliquaries in the context of church furnishing, and most especially the question of distinguishing between a reliquaries' place of storage (where it was kept safe) and its place of display (where it was ostentatiously intended to be viewed). Reliquaries have been found both inside the main body of the church itself, as well as in annexe-rooms. Save for those cases in which they were deposited directly beneath the main altar, when reliquaries and their associated materials are recovered by excavation, the question of intentional ritual visibility must always be considered. That is to say, before moving to consider the precise role they might have played in the liturgy, a series of questions must be answered which might establish a reliquary's spatial context: was it likely that they were intended to be visible?; does the reliquary appear to be in a permanent location?; does it appear that it may have been intended to be moved as a portable object?; could the faithful offer veneration to the object *in situ*?

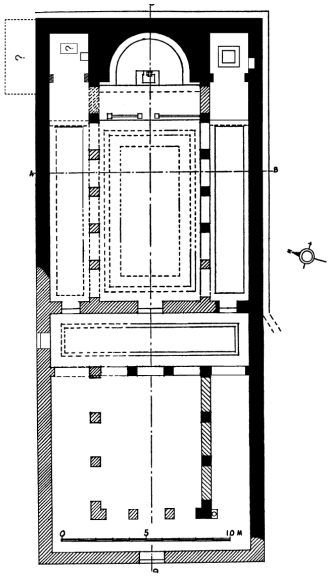
[51] Negev (1988) 45–46, figs. 45, 50.
[52] Lender and Gazit (1991) 43.
[53] Segal (2003) 13–14; Segal (2002) 6–8.
[54] Prausnitz (1967) 26–30.
[55] Tzaferis (1983) 12–18.



Eastern Church of Mamshit
(A. Negev, Mamshit, pl. 109)



Horvat Hesheq
(M. Avian, 1986, p. 51, fig. 22)



Ein Hanniya
(D. C. Baramki, 1934, p. 115)

Fig. 4 Reliquaries below tables in the annexe room.

By answering these questions, we might hope to establish whether or not the object—as excavated—was in storage or on display, and thus we might move closer to understanding the precise role which it might have played in a liturgical context.

This issue perhaps touches upon a wider question concerning the relationship between changes in the architectural space of individual churches, and the evolution of the liturgy. This is a problematic question, and the constraints of this paper preclude any detailed treatment of the issues. But generally speaking, the position taken herein is that changes in the liturgical celebrations of ritual have no effect on ecclesiastical architecture. In general, transformations of the liturgy have little impact on church spaces during the period in question; it is more appropriate to consider the impact on changing perceptions of what the liturgy means and how it functions as a symbolic celebration in the community, rather than attempting to tie down specific evolutions in formula and connect them with certain architectural modifications. Therefore, it makes better sense if we attempt to view the issue holistically, and understand how the changing needs of the clergy, or the size of the community, or shifting understandings of the role of relics, all affected church space, rather than trying to attribute such changes to particular alterations of the liturgy itself.

Naturally, the shifting role that relic cult played over the centuries in question had an impact on the ways in which the material space of the church developed. From the end of the 5th c. onwards, and particularly during the 6th c., the proliferation of small chapels created a whole new constellation of focal-points for the faithful during the Eucharist. Such chapels were not only external self-standing buildings in the immediate landscape around the central church, but were also additions to the internal space of a church building. Palestinian churches follow several traditions, either transforming a tri-partite eastern end into a tri-apsidal space, or adding a second flanking apse on either side of single-apse church. Reliquaries might fit into one of several places inside this new layout. Inside tri-apsidal churches, the reliquary might be placed on a central altar, in the absence of a niche, or if an available niche was too recessed and prevented the reliquary from being visible to the congregation in the nave, as was the case at Oboda-South. The table for the display of reliquaries might be in front of the lateral apse, as was the case in the north-west church at Hippos,[56] or against the chancel

[56] Segal (2001) 17–18.

screen, as in the church at Elusa.[57] Finally, there is a single example of a *martyrion* in an external annexe-room, at Jabaliayh near Gaza. Here, the excavator found a tomb in a room in the north-west wing, just west of the baptistery, and thus reconstructed a sarcophagus-cenotaph, presumably connected to relic cult.

In the churches of Hesheq, Mampsis-East, and probably also at Ein Hanniya, a cavity which appeared to be for housing relics was itself surmounted by a table that was supported by 4 marble legs. At Mampsis-East, two wide steps led up from the aisle to a room at the eastern end,[58] separated by a wide arch resting on engaged pilasters projecting from the wall. This room, north of the altar, was paved and in its centre a reliquary was discovered beneath a small altar table, traces of which were found as the imprints of its legs on limestone sockets. The reliquary itself, sitting beneath the table, was small, fashioned from stone that had been lined with fine plaster, and sunk into the floor. The southern room of the same church was also paved, and two further reliquaries were recovered. The first was similar in form to that recovered from the northern room, with a stone-built reliquary surmounted by a 4-legged table. Its cover was missing, and its interior was found to contain only building debris. From the southern room of the church at Ein Hanniya,[59] a table was presumably situated in the area of the floor that lacked a mosaic, and it possible to reconstruct a space that was sunk into the floor beneath the table.

Excavations at the site of Hesheq have uncovered three reliquaries:[60] one in the church's central apse, one from its south apse, and a third portable reliquary which was recovered from the area of the nave. This latter object measured 27 cm × 17 cm × 12 cm; on two of the box's sides there were grooved tracks which would have enabled a lid (which was missing) to be slid on and off, and one side featured a small bronze spout. Presumably the missing lid would have featured a small hole, into which oil would have been poured, which then would have been poured out again through the spout and into the waiting receptacles of the congregation. The reliquary recovered from the south apse had been sunken into the room's floor surface; it measured 30 cm × 25 cm × 15 cm, and it was covered by a lid fashioned from low-grade yellowish crystalline marble, into which had been drilled a small hole

[57] Negev (1989) 131–34.
[58] Negev (1988) 45–47, figs. 47–50.
[59] Baramki (1933) 116, pl. XXXIX.
[60] Aviam (1993) 58–59.

(diam. 5 mm). The lid had been fixed fast by means of drilling further holes at the edges of the container, which pierced both the lid and the container's sides; into these holes molten lead was poured and bronze pegs fastened (although during the reliquary's excavation, it was found to be empty).

The locations of all these reliquaries are problematic, and once again we must take care to distinguish between the place where such objects were stored, and the place where they were put on open display. Of course, a portable reliquary is intentionally designed to be moved from the former space to the latter, and perhaps in these cases, reliquaries were stored under the very tables they were placed upon for display. Even today, at the church of the Holy Sepulchre in Jerusalem, the rock of Golgotha is accessible to pilgrims who put their hands into an *oculus* beneath a table (fig. 5). We can also mention a recent discovery on the top of Tiberias (Galilee) in the church of Mt. Berenice.[61] A big stone anchor was found in the place of the base of the altar in the main apse, maybe to be venerated as a holy stone or, because of the perforation in the centre of the stone, to receive some important relics. If this were the case at the sites under consideration here, then the faithful must have been able to access the locations of the tables upon which the reliquaries were periodically placed. In fact, at both Mampsis-East and at Hesheq, the chapel in which the objects were found lacks any form of chancel screen that might have prevented the access of the faithful, and so in these two locations it seems as though direct veneration of the objects was possible, once they were placed on display.

In other cases, however, it seems as though reliquaries were not intended to be moved, and therefore their place of storage was essentially also their place of display. In the north church as Sobota, the reliquary was deposited in the lateral apse, in a place that was visible from the main body of the church. In the church of the Martyrs at Tel Iztabba (Beth Shean), two external lateral apses extended at both ends of the transepts, either side of a larger central apse.[62] In the centre of the northern apse a large marble sarcophagus was discovered, access to which was limited by a chancel screen, and which was accompanied by no other church furniture.

[61] Hirschfeld (1997) 38–42; Hirschfeld (1994a) 122–33; Hirschfeld (1994b) 33–37, fig. 35.

[62] Bar-Nathan and Mazor (1992) 50–51; Bar-Nathan and Mazor (1998) 30–32.

Fig. 5 Holy Sepulchre, Chapel of Golgotha: table dressed on the rock of Golgotha.

Several textual sources specifically describe the *diakonikon* as a room in which relics were housed inside a cupboard. According to Cyril of Scythopolis, such objects were kept inside a cupboard in the *diakonikon* at the monastery of Saint Euthymius:[63] 'We have in the *diakonikon* precious pieces of the holy wood of the Cross. The *higoumenus* went to the *diakonikon* and opened the cupboard of treasure'. In this text it is the spatial precision which is striking: such a precise mention of a cupboard and its exact location is rare, and Cyril is clearly referring to a room that is external to the main body of the church.[64] Similarly precise is a Georgian letter from a Palestinian text of the 6th c. (*L'Apocalypse de Zacharie, Siméon et Jacques*)[65] which details the specific deposition of relics inside a chest used for sacred vessels in the *diakonikon*. Certain other texts also tell us something about the transfer of reliquaries from storage to display, including Egeria (who travelled through Palestine in the years A.D. 381–384) and other witnesses during the 5th–7th c., who attest that the True Cross was stored in a side room near to the atrium of the church of the Holy Sepulchre, but was moved on Holy Thursday to a table, covered with an altar cloth, and left for the faithful to venerate.[66] The Piacenza Pilgrim describes how it was brought out of its small room into the courtyard, and laid down so that pilgrims might try to sanctify vials of oil they held by touching them to the relic.

Yet archaeology too can tell us something about this movement of reliquaries between storage and display, especially when such objects are found in external annexe-rooms with no sign that they were visible or accessible for veneration (as was the case with the reliquaries found at the northern church at Oboda,[67] or the portable reliquary at Hesheq). At other places, such as the southern church at Oboda,[68] another distinction can be identified archaeologically, between a niche and a table. One final point to be derived from archaeological evidence is that all of the portable reliquaries that we uncovered appear to have been small enough to have fitted inside the dimensions of the cupboards excavated at those sites.

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[63] Cyr. Scyth. *v. Euthym.*, 69.1–69.20.
[64] Cyr. Scyth. *v. Sab.*, 101.20–103.8.
[65] Verhelst (1998) 88.
[66] Egeria, *Travels*, 37 (ed. Maraval (1996) 130); *Le Pèlerin de Plaisance*, 20.1–2 (ed. Maraval (1996) 218); *Breviarius de Hierosolyma*, 1,8 a (ed. Maraval (1996) 180).
[67] Negev (1997) 115, figs. 166–67.
[68] Negev (1997) 131–34.

Conclusion

My conclusions will now focus on the *diakonikon*, drawing on epigraphy, texts and archaeology, and what examinations of furniture, furnishings, and reliquaries might tell us about the nature and function of the room. In the 4th–5th c., the *diakonikon* was the place in which the deacons received, selected, and prepared the Eucharistic offerings brought by the faithful, but this custom gradually diminished from the end of the 5th c. onwards. From then on, it became a place of preparation alone, and according to Anastasius of Sinai,[69] during the 7th c. it was also the place where the offertory procession to the altar began. Such a procession did not happen in all Byzantine churches, however, and nor did it happen all year round. The *diakonikon* also functioned as a storage room for relics, particularly from the end of the 5th c. onwards, at a time when relic cult as a whole was becoming more and more popular in the region. It also functioned as a treasury, and inside the closed cupboards that were archaeologically-excavated and textually-attested, money, gold, and sacred vessels would have been kept. These cupboards also would have held the church's stock of liturgical vestments. In sum, the *diakonikon* was an indispensable part of the church's liturgical life, and was the only annexe-room of a church ever to be specifically named during the period. Often, archaeological evidence including the architectural position of the room or the individual materials excavated within it might permit the identification of one specific room within a church structure as the *diakonikon*, but more often than not a lack of concordance between the texts, the archaeology, and the liturgy, prevents such a specific identification.

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[69] Nau (1903) 67; Verhelst (1998) 194, 197–98.

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STORING IN THE CHURCH: ARTEFACTS IN ROOM I OF THE PETRA CHURCH

Zbigniew T. Fiema

Abstract

Excavations of some Byzantine churches in Palestine and Jordan have revealed the existence of stored material in rooms adjacent to the churches. Room I of the Petra church yielded a particularly interesting corpus of material, ranging from papyrus scrolls through glass and metal objects to wooden storage furniture, which provided the opportunity for a detailed study of artefacts and their spatial relationships, both to each other and to their architectural context. The following text summarises this discovery, concentrating on patterns of storage and changes in the function of Room I within the framework of the history of the Petra church.[1]

Introduction

The excavation of a large Byzantine church complex in the centre of Petra in southern Jordan by the Petra Church Project, between 1992 and 1997, has provided a plethora of information concerning the ecclesiastical architecture and the material culture of Byzantine Petra.[2] The discovery of a large corpus of papyrus documents in Room I of the church complex in 1993 has unexpectedly opened a new avenue of research, by providing much needed documents relating to the socio-economic history of the city in the 6th c. A.D.[3] The following text

[1] The detailed description of the finds in Room I is presented by Fiema (2001a), followed by a short summary by Fiema (2002a).

[2] The project was organised by the American Center of Oriental Research (ACOR), and directed by Pierre M. Bikai, ACOR Director, with the author in charge of the fieldwork.

[3] The conservation of the papyri was carried out by the Finnish team under the direction of Jaakko Frösén. The publication of the Petra Papyri is by the teams from the University of Helsinki and the University of Michigan, headed by Jaakko Frösén and Ludwig Koenen, respectively. The first volume, by Frösén, Arjava and Lehtinen (2002), contains the full bibliography of publications concerning the papyri (pp. XI–XII). For the archaeology, history and culture of Byzantine Petra, see Fiema (2002b).

L. Lavan, E. Swift, and T. Putzeys (edd.) *Objects in Context, Objects in Use* (Late Antique Archaeology 5 – 2007) (Leiden 2007), pp. 607–623

will examine the types of artefacts found in Room I and the overall significance of Room I within the history of the church complex.

The Byzantine church in Petra, probably dedicated to the Virgin Mary,[4] is so far its largest known Christian edifice. Altogether, 14 phases of occupation, interspersed with episodes of destruction, remodelling, restoration, and abandonment, have been archaeologically discerned in the history of the site. However, the ecclesiastical complex was not the first structure built on this particular spot in Petra. The first three phases (I–III) represent the Nabataean-Late Roman period (1st to mid-5th c. A.D.) domestic occupation in what seems to have been a large courtyard house. The church was constructed in the later 5th c. (Phase IV), and comprises a basilica, forecourt, baptismal annex consisting of three rooms, and some adjacent structures. The notable irregularity of the church plan in the area of the northern apse reflects the incorporation of some rooms of the previous domestic residence, including Room I, into the church complex. During Phase V (early to later 6th c.), the church was magnificently decorated with marble furniture and wall and floor mosaics. After the last phase of the ecclesiastical occupation (Phase VI; later 6th c.), the church appears to have been undergoing some kind of remodelling (Phase VII) apparently interrupted by its destruction by fire (Phase VIII) sometime between the end of the 6th and the beginning of the 7th c. The church was abandoned and subjected to a systematic removal of useful objects and materials, while the non-ecclesiastical occupation continued in the atrium (Phase IX; early to mid-7th c.). The phases which followed represent non-ecclesiastical occupation and episodes of (seismic) destruction.

Room I: From A Dormitory To Destruction By Fire

The appearance of Room I is directly relevant to the changing function of this room in the history of the church complex (fig. 1). During the initial period of its existence (Phase III; A.D. 363 to mid-5th c. A.D.), Room I was a dormitory in a larger residential quarter. This room which also had an upper floor accessible by a ladder and a trapdoor, was situated in the back of the quarter, and could be accessed only

[4] Frösén (2004) 142.

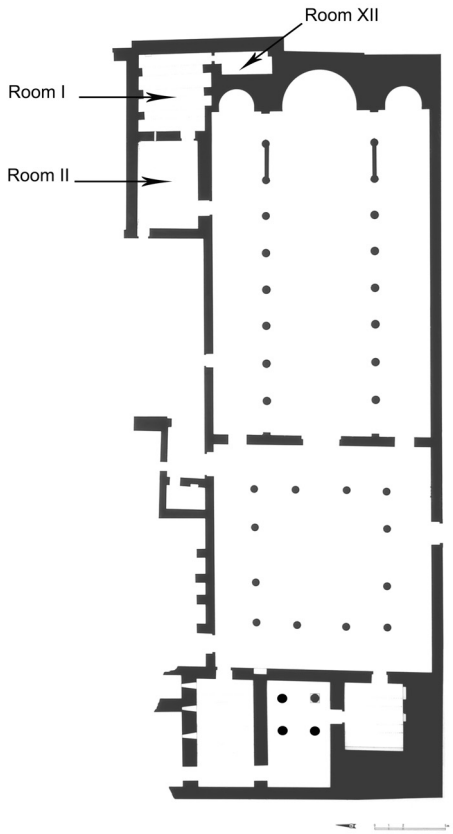

Fig. 1 Sketch-plan of the Petra church with the locations of Rooms I and II; as modified from Fiema (2001b) 10 (C. Alexander, Z. T. Fiema and S. Shraideh).

through the neighbouring Room II, while providing access to Room XII which, during that phase, was probably a dead-end (fig. 2). The upper floor was supported by three arches with corresponding pairs of pilasters against the northern and southern walls. The ceiling of the ground floor was made of large wooden beams, with clayey soil mixed with reeds and twigs filling up and sealing the spaces between the beams. A layer of mortar above the clay formed the actual bedding for the stone pavement of the upper floor.[5] Quantities of iron nails,

[5] For such construction, common in Palestinian vernacular architecture, see Hirschfeld (1995) 183–84, 237–39.

Fig. 2 Room I, view to the south-east featuring the southen pilasters with permanent shelves, i.e., the area of the Smaller Archive (photo by Z. T. Fiema).

as well as clamps, fasteners, spikes and rivets, all of which would have been used in the ceiling and roof construction, were found in all of the lowermost strata.

There was no indication that windows had once existed at ground level. The upper floor was partially open by means of a loggia, and sunlight could have entered the space below through the trapdoor. Permanent stone shelves between the pilasters along the southern wall facilitated storage of domestic items. In short, the arrangement of the room and the evidence for a wooden cot in the north-west corner, and possibly other bedding platforms against the northern wall, indicated that the room served as a dormitory designed to maintain privacy and security.[6]

In Phase IV (late 5th early 6th c.), Rooms I, II and XI were incorporated into the newly built church complex. The bedding installations were removed. The means of access did not change, compared with Phase III. Room I could not be directly accessed from the church

[6] For a detailed description of Room I, see Kanellopoulos (2001) 153–57; Fiema (2001b) 20–22, 39, 79.

proper, but only through Room II. At that time, the adjacent Room XII had certainly become a dead-end; probably, a staircase well for access to the upper floor and empty space behind the northern *pastophorion* (later apse) and the central apse of the church. Presumably, the general appearance of Room I did not change during Phases V–VII (comprising the whole 6th c.). The lowermost deposits (loci 12A and 12B, horizontally parallel to each other) contained most of the artefacts, presumably representing the furnishing of the room just before the fire destruction in Phase VIII (fig. 3). The following stratigraphical units were locus 12 and locus 11, the latter representing the collapse of the stone pavement of the upper floor. Finally, the lower remains in Room I were buried under a subsequent deposit of stone, either seismic- or natural decay-related, almost 4 m thick.

Whilst the cause of fire could not be determined, a wave of heat might have reached the windowless ground floor of Room I through Room II, and combined with the heat generated by the burning process occurring in the upper floor of Room I. The extremely high temperature which accompanied the fire contributed to the carbonising process of

Fig. 3 Room I, view to the North featuring the lowermost fire-related deposits: locus 12B (Main Archive) to the left and locus 12 A to the right (photo by Z. T. Fiema).

most of the papyrus scrolls in Room I. The composition of the ceiling, mentioned above, must have contributed to the particular state of preservation of the carbonised scrolls. Simultaneously with the burning of beams, the clayey soil, mortar, and wall plaster (peeling off due to the high temperature), collapsed on top of the scrolls and other objects in the room, forming a baked crust which prevented total burning by denying the access of oxygen. Instead, the carbonisation of the scrolls resulted, which, as the final effect, secured their remarkable preservation. However, direct burning by fire is also attested and it must have contributed to the destruction of other, especially wooden, artefacts in Room I. It is also possible that heat had built up inside the room and reached a critical degree producing a 'flash-point' effect. That spontaneous combustion completely destroyed some scrolls, which burned to ash beyond recovery.

The fire destruction was accompanied by the collapse of the stone pavement of the upper floor. Subsequently, Room I was open to rainfall and wind-blown sandy material, and human activities and natural phenomena further contributed to the extant deposition pattern inside the room. Recoverable or valuable objects might still have been removed during later phases. Notably, the fire-related debris was clearly disturbed and partially removed from the south-west corner of the room during the enigmatic digging activities which took place inside Room I in Phase XI.[7]

The Papyrus Deposits

Two spatially recognizable groups (the Main and the Smaller Archive) of papyrus scrolls were found inside the room. The Main Archive was found in the space *ca.* 2.3 m long and 0.45 m wide (locus 12B), along the western wall. Within this space, three distinct clusters of scrolls (northern, central and southern) could be recognised which, to a certain degree, indicate the original location of the scrolls. While the northern and southern clusters became carbonised basically *in situ* (i.e. in their original storage place), the scrolls of the central cluster may have originally belonged to the northern cluster.

[7] For all these activities, see Fiema (2001b) 112–14.

The northern cluster was located in the recess created by the western wall and the western pilaster on the northern wall. Both the excavations and the subsequent conservation of the scroll fragments from this cluster revealed a multiple-level accumulation of horizontal charcoal interspersed with individual scrolls or scroll fragments.[8] Fragments of small boards, at least 10–15 cm long, *ca.* 1–1.3 cm thick, and *ca.* 5.5 cm wide were recovered. At least three levels of boards were noted, including the bottom level which lay directly on the stone floor of the recess. These boards most probably represent three or more shelves, one above the other, belonging to a wooden bookcase. The bookcase would have been a simple design with vertical wooden boards on both sides supporting horizontal shelves. The pattern of charcoal deposition would suggest that the bookcase caught fire, became somewhat twisted, and collapsed, probably spilling the contents of the upper shelves to the south-west, forming the central cluster deposit. The remaining (lower) shelves and their contents vertically crumbled within the confines of the recess, forming the northern cluster of scrolls.

The manner of storage of the scrolls in the northern cluster is of further interest. Some may have been directly deposited upon the shelves without additional containers. But several charcoal fragments have also been recovered which may suggest some sort of containers deposited on the shelves. This evidence is not homogeneous; rather it implies a motley collection of different containers, perhaps ranging from small and delicate rectangular boxes to equally small, but rounded, barrel-like casks or buckets. The evidence for storage containers is also apparent for the southern cluster of scrolls, although no bookcase existed there. Iconographic representations of storage containers for papyrus scrolls, i.e., bucket-like boxes (*capsae*) in which scrolls were vertically stacked, are of use here.[9] A *capsa*, which comes from a wall-painting in Pompeii, has a lid and two straps attached which makes it a portable container.[10] Presumably, these buckets were made from thin wooden staves. Some

[8] For the conservation process, see Frösén and Fiema (1994); Lehtinen (2002a).

[9] The term *scrinium* can also be used, being synonymous with *capsa* in the case of cylindrical containers for storing scrolls. S*crinium* may also refer to a multi-shelf bookcase; Kenyon (1951) 62. From the late 3rd c. onwards, the *scrinium* came to denote an office or chancellery of high officials in charge of governmental documentation and correspondence, where such documents were stored. For *scrinia* and *capsae*, see respectively Seeck (1921) 893–904; Mau (1899) 1553–54.

[10] Turner (1987) 34, pls. 9–10. See also a *capsa* as reconstructed from a wall-painting in Egypt by Gardthausen (1911) 149.

of the vignettes of the insignia associated with various high officials of the Late Empire, and reproduced in the *Notitia Dignitatum*, are also instructive.[11]

The central cluster is formed of a group of scrolls in the area south-west of the northern cluster. The distribution there was non-patterned; basically, in chaotic heaps. Not many worked pieces of wood were found there. As suggested above, the post-fire location of this cluster must be secondary to its original position which was most probably on the upper shelves of the bookcase. The general lack of worked charcoal pieces directly associated with the scrolls of the central cluster may thus indicate that the majority of the scrolls which collapsed from the shelves were not protected by containers, and thus could have rolled as far as *ca.* 1 m away from the bookcase.

Finally, the southern cluster was tightly confined to the southern area of the Main Archive deposit, close to the western wall of Room I. Apparently, there was no permanent storage installation (shelving) in that area, but at least some of the scrolls there were stored in small containers, while all of them were presumably placed directly upon the stone floor of the room. Within the main part of the cluster, the separate scrolls and the groups of scrolls recognised as such during the excavations tended to lie side by side in a general N-S orientation. All the evidence combined suggests that the southern cluster of scrolls was indeed found *in situ*, i.e., the scrolls were carbonised in their initial place of deposition.

The excavations and the conservation process have yielded samples of strings and textile wrapping for the scrolls, all totally carbonised. Some tightly rolled scrolls were tied in the middle with a textile or papyrus-made string. At least some of them were then wrapped up in a textile,[12] but no evidence for protective leather sleeves or purses was found.[13] Only one, rather large fragment of basketry was recovered from Room I (locus 12A), perhaps part of a bucket or cist-like container, similar to the one found in the Cave of Letters.[14] The comparative

[11] E.g., on the vignettes of the *quaestor sacri palatii* (*Or.* XII, *Occ*. X), *primicerius notariorum* (*Or*. XVIII, *Occ*. XVI) and *magister scriniorum* (*Or*. XIX, *Occ*. XVII).

[12] For a good example of this, see a photograph of one of the scrolls from the Babatha archive; Yadin, Greenfield and Yardeni (1994) 76.

[13] As in the case of the Babatha Archive from the Cave of Letters; Lewis (1989) 3–4.

[14] Yadin (1963) 151–56.

textile, cordage, and basketry evidence from Palestine is abundant, and also from contexts containing papyri.[15]

What came to be termed the Smaller Archive of papyrus scrolls was found in the shelving along the southern wall of Room I. At least 4 stone shelves existed along that wall; two western and two central ones. These were permanent features which had been inserted in specially prepared slots in the pilasters during the construction of the room in Phase III, probably soon after A.D. 363 (fig. 2). The two central shelves broke and collapsed together with their contents on the floor between the pilasters, forming a deposit, locus 14, *ca.* 35 cm thick, in a matrix of ashy soil. This deposit contained papyrus scrolls, substantially smashed and largely beyond recovery. Apparently, the scrolls were originally stored on the upper rather than lower shelf, and became carbonised when still on the intact shelf. In addition to the fragments of broken shelves, a very ashy and fine grained sandy soil matrix, and the badly crushed scrolls, other material was also found in the debris of locus 14. The most abundant were charcoal fragments, although no recognizable pieces of boxes or casks were noted. It may be that originally the scrolls were simply put on top of the shelf without protective containers. The impact of the substantial heat and collapsing plaster/mortar and clayey soil from the ceiling produced a substantial 'baking' effect which, in this particular case, made most of the scrolls from the Smaller Archive unrecoverable.

Wooden, Metal and Glass Objects

Numerous finds of charcoal fragments which still preserved a recognizable shape were found in the non-scroll contexts, i.e., loci 12 and 12A. Pieces from there tended to be larger in size compared with equivalent pieces from the Main Archive. The relatively larger size, and widespread distribution of these pieces in fire-related strata in Room I indicate the existence of portable storage (boxes, chests), other than that directly related to the scrolls. The collected material features the use of some basic methods of joining in furniture carpentry, such as

[15] E.g., the Cave of Letters, see Yadin (1963); Qumran Cave 1, see Crowfoot (1955) 18–38; and the caves of Murabba'at, see Crowfoot and Crowfoot (1961) 51–66. For the temporally comparable material from the Byzantine churches in Nessana, see Colt (1962); Bellinger (1962).

pegging, interlocking at right angles by using tenons and corresponding mortises, and joining at right angles by using tongues and sockets or grooves.[16] Although pure dovetailing was not noted, some partially preserved holes appeared ready to receive a wedge-shaped tenon. Such elements could serve as bookcase shelves as well as the sides of a wooden chest. In short, these types represent a variety of wooden elements used in small-scale carpentry which depends on simple joining, with glue, wooden pegs and iron nails.

The existence of portable wooden storage pieces is further supported by the iron and bronze lock and key-plates and lock mechanisms, also found in loci 12 and 12A. Excellent comparative material, provided by finds from the Byzantine shops at Sardis, dated to the 5th 6th c.,[17] provided the basis for the recognition of some metal objects from Room I as complete rectangular or circular locks, key plates with key holes,[18] and a number of butterfly-type hinges, some of a very small size (*ca.* 7 cm long and 4 cm wide). Admittedly, these hinges may represent the mechanism associated with the door in the western wall of the room, but the number of finds exceeded those of a single door mechanism. Associated with one lock-plate were charcoal fragments and very small glass shards. These were dark yellowish green, too thick to be window panes, generally of rectangular shape. Thus it is evident that there was at least one chest or coffer in Room I, probably ornately decorated with glass inlay, and well-secured by a lock-and-key mechanism. Again, some comparative material may be provided by images of boxes in the vignettes of the *Notitia Dignitatum*.[19] The objects in question look like sturdy boxes, probably wooden, characterised by dovetailing joinery, and/or reinforced in the corners by L-shaped horizontal brackets or clamps. Judging from their appearance, and from the function of the officials, such boxes could have been money-chests. All this may imply that, in addition to the papyrus scrolls, Room I was also used for the storing of items of some value (cash, precious stones, liturgical objects?).

Practically no pottery was found in the entirety of locus 12, and only a few small, and indistinguishable pieces in loci 12A and B, none

[16] See classification by Yadin (1963) 134.

[17] Particularly shops E9–E11, which were interpreted as a 'hardware store', see Crawford (1990) 71–78; figs. 366, 368.

[18] On the basis of typology presented by Waldbaum (1984) 69–70, pls. 23–24.

[19] E.g., the vignettes associated with the *comes privatarum* (*Or.* XIV, *Occ.* XII), and the *comes sacrarum largitionum* (*Occ.* XI, but not *Or.*).

belonging to storage jars. However, great quantities of glass fragments were collected from fire-related strata, especially loci 11 and 12. The majority of the collected material seems to belong to hanging lamps, both hollow-stemmed and handled-bowl types. Both types are generally dated to the 4th 6th c., the early 7th c. also being possible. The absence of the solid-stemmed version indicates a pre-Umayyad date for the lamps from Room I, as for the entire glass corpus from the Petra church.[20] Only very few fragments of bronze polycandela were found, among them a hook with a section of a chain attached, and a thin bronze plate shaped as a stylised cross within a ring. The hole in one of the arms indicated that the piece was a part of a polycandelon hanger.[21] Additionally, a number of iron hooked bars, which were probably fixed to the beams, and from which the polycandela were suspended, were found in loci 11 and 12. The stratigraphic position of some of the glass lamp clusters indicates that they might have fallen down from the level of the upper floor.

Some glass shards from locus 11 appear to be parts of shallow bowls and goblets or flasks which either fell from the upper floor level or were stored on the shelves situated on the ground floor. Vast quantities of window pane glass were also recovered, especially from loci 11 and 12. There is little doubt that all of this was originally installed in windows of the upper floor of Room I. Additionally, locus 12 yielded 9 rectangular glass pieces, each *ca.* 4.5 cm long, 2.3 cm wide, and 0.6 cm thick, and two of slightly smaller dimensions, all originally transparent, but now covered by a deep bluish or greenish patina. These glass pieces superficially resemble domino-type pieces, although their lower edges are bevelled. Some glass discs or rounded pieces were also found (diameter from 0.6 cm to 3.4 cm, and thickness *ca.* 0.7 cm). Some were globular but flattened on one or both sides. All pieces had at least one flat surface. Presumably, all these pieces were originally attached to other objects, such as wooden boxes or chests mentioned above, possibly as inlaid decoration.[22]

[20] O'Hea (2001) 372.

[21] A comparable object, although without the encircling ring, was found in the area of the Civic Complex church in Pella; Smith and Day (1989) 114–15, fig. 32.

[22] I am thankful to Lisa Kahn and Daniel Keller for observations supporting this hypothesis. Such glass discs for inlay work were also reported from Byzantine levels at Jerash; Baur (1938) 546.

Conclusions

Apparently, all the artefacts described here were associated with the latest, pre-fire, occupation phase in the church complex, although they might have been stored in Room I during the preceding phases. The spatial relationship of these objects was relatively clear. The lowermost loci (12A and 12B), directly on the floor, contained the papyrus scrolls and wooden and metal elements related to either their containers or some other boxes or chests. From the deposit directly above (i.e., locus 12), other wooden furniture remains, glass fragments and metal objects were recovered, all of which were followed by the broken pieces of the stone pavement (locus 11) which had collapsed from the upper floor. These finds, however, need to be assessed within the context of the presumed function of Room I. Initially, Room I was a dormitory and, except for the permanent shelves, nothing is preserved from these early phases. With the incorporation of the residential quarter into the newly built church complex in Phase IV (late 5th–early 6th c.), Room I would have become a perfect place for the storage of church-owned moveable possessions of significant value. Although Room II, adjacent on the west side to Room I, was at that time a major communication hub with direct access to the church proper and other rooms on the northern side of the church, Room I remained a single-access room (Room XII being a dead-end), surrounded by heavy walls which accorded security and protection. This special function would probably have continued until the end of the active occupation of the room, and is exemplified by the finds of relatively well-made and ornamented boxes/chests equipped with locks.

The lack of simpler, utilitarian objects, such as ceramic jars and pots, differentiates Room I from other rooms adjacent to churches, such as Rooms 2–5 by the C101 Lower Church in Humeima. These rooms yielded quantities of liturgical glass lamps, storage jars, and cooking pots. In addition, Room 2, with its direct access to the northern aisle of the church and no other external access, was considered by the excavators to be a sacristy.[23] Notably, Room I of the Petra church occupies the same location (north-east corner) as Room 2 in the Lower Church of Humeima. While some church-related glass lamp fragments were found in Room I, no clearly distinguishable liturgy-related objects, such as

[23] Schick (1995) 330–33.

liturgical vessels or vestments, were found there specifically associated with the last occupation phase (VII; end of the 6th c.). Arguably, these might have been stored in the wooden boxes and recovered after the fire, if not seriously damaged, and the actual presence of such objects in Room I during the preceding phases is possible, although unproven. Yet, Room I was never directly accessed from the church proper and for this and the other reasons mentioned above, one is hesitant to assign a sacristy or *diaconicon* function to Room I.

Theoretically, the room could have become a continuing, active storage place for papyrus scrolls any time in Phases IV–VII (i.e., within more than 100 years) although, as postulated below, the latest date of deposition, i.e., shortly before the fire, is preferred here. Initially, one may consider the architectural design of the room as specifically related to the storage of papyrus documents. Unfortunately, no architectural parallels of archive rooms are appropriate since the function of Room I as a church storage room and depository for papyrus documents is only secondary or even tertiary to the initial function for which it was built. The lack of tables and inkwells, and of adequate sunlight-providing windows, as well as restricted accessibility, are the elements which would evidently exclude the possibility of this room functioning as a *scriptorium*. It seems that Room I remained till the end a specialised storage or strong-room.

The manner in which the papyri seem to have been deposited does not resemble a situation in which documents were periodically and systematically filed. The scrolls were not the only items stored in the room, nor necessarily the most important ones for the owners of the room. The intrasite spatial organization in the room appears somewhat haphazard in character as if in a little-frequented place. The pattern of the main deposit of scrolls may, in fact, represent a rather careless deposition in bulk. Some precisely dated scrolls, which were once stored together in a multiple-shelf bookcase located between the western pilaster and the western wall, are separated by a considerable span of time. Furthermore, there is one scroll in the archive which is totally blank. All this hardly implies a consistent or orderly filing system. In addition, the location of the southern cluster of scrolls directly on the floor, even if in wooden containers, is neither a practical nor a safe way of storing important documents, but perhaps reflects an intentional lack of concern. The spatial organization of the scrolls would suggest that these documents were apparently still of some significance, to be kept, although not in active use, and not subjected to periodical filing, or warranting special care or protection.

The information derived from the scrolls themselves may shed further light on the nature of the archive as well as the function of Room I. The papyri are private papers of Theodoros son of Obodianos, the deacon and then archdeacon of the Church of the Virgin Mary in Petra, presumably the church where the papyri were found. The earliest dated scroll bears the date of A.D. 537, while the latest one is from A.D. 592.[24] All of them are documents specifically related to Theodoros and his extended family, which pertain to sale, acquisition, transfer, and registration of landed property for tax purposes, as well as sworn and unsworn statements concerning possession, disposition, inheritance, marriage agreements, and various disputes. The nature of the documents makes it probable that at least some of these were or were intended to be copies of originals kept by other involved parties.

Considering all these factors, it is reasonable to propose that the scrolls were handed over to the Church authorities, and deposited in Room I either in large batches or, more probably, in a single episode, either by Theodoros himself or by his descendants, or after the death of his heirs.[25] The purpose was safekeeping a permanent and final disposal of the scrolls rather than active use and periodic filing even if their function had by this time become obsolete. That means that the date of the latest rather than the earliest document is significant here.

The closest parallel to the Petra Papyri, both spatially and temporally, is the group of papyri found in the Negev town of Nessana.[26] There is indeed a similarity between Room I in Petra, and Room 3 (South Church complex) and Room 8 (North Church complex) at Nessana where papyrus archives were found. All three rooms were storage spaces for items other than just scrolls, thus none of them were fully specialised archival storage rooms. Room 8, similarly to Room I, contained a small cupboard in the corner. Also, at least some of the archives at Nessana deal with property rights and various personal business transactions.

[24] Arjava (2002) 23; Frösén (2004) 141.

[25] Koenen (2001) 728; Koenen (2003) 202, n. 4. Theodoros was still alive during the reign of Maurice (A.D. 582–602), and at least one of his two known sons predeceased him. The children of the other son were probably alive in the 590s; Lehtinen (2002b) 9–10. Probably, Theodoros died before A.D. 592; Koenen (2003) 202, n. 3.

[26] Unfortunately, the reports on the archive in Room 3 of the South Church complex in Nessana admit a confusion and lack of detail related to the excavation of the papyri and the contents of the room. The description of the archives in Room 8 of the North Church complex is rather short; Kraemer (1958) 3–5.

Surface damage of some papyri, and an extraordinary number of small pieces and scraps, seemingly reflect neglect and damage incurred even before the destruction of the rooms. Thus the excavators at Nessana concluded that the purpose of the deposit was permanent disposal rather than temporary, active shelving.[27] This statement may equally apply to Room I and its scrolls.

The reason why scrolls were deposited in the church complex is best understood in terms of the socio-political and cultural milieu with which the Petra scrolls are associated. The Christian Church as a powerful and influential institution, which often functioned as an arm of the state in the Late Byzantine Near East, could accord both physical and institutional security in protecting documents, such as last wills or transfers of property, especially if they belonged to the clergy, wealthy parishioners, or important benefactors. The Church also gradually took over certain institutionalised activities that were previously in the domain of the municipal government. By the later 6th c., municipal archives had largely ceased to function, despite imperial efforts to revive them, and the registration of private property as well as the safekeeping of documents appears to have been largely under Church control.[28] Even if some of the documents had already lost their initial importance, their storage in the church complex guaranteed their survival and/or potential further use.

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[27] Kraemer (1958) 4.

[28] Just. *Nov.* XV, III.73; VII.3. For discussion, see Saradi-Mendelovici (1988a) 375; Saradi-Mendelovici (1988b) 117, 119.

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Fig. 1. Sketch-plan of the Petra church with the locations of Rooms I and II; as modified from Fiema (2001) 10 (C. Alexander, Z. T. Fiema and S. Shraideh).
Fig. 2. Room I, view to the south-east featuring the southen pilasters with permanent shelves, i.e., the area of the Smaller Archive (photo by Z. T. Fiema).
Fig. 3. Room I, view to the North featuring the lowermost fire-related deposits: locus 12B (Main Archive) to the left and locus 12 A to the right (photo by Z. T. Fiema).

ORDINARY OBJECTS IN CHRISTIAN HEALING SANCTUARIES

Béatrice Caseau

Abstract

The evidence from miracle stories and from archaeology is used in this paper to document the appearance and contents of the healing shrines of Late Antiquity; particularly the prosaic objects of everyday life that would have been present at a shrine alongside liturgical and devotional objects. It explores the evidence relating to the everyday lives of those staying at the shrine, and shows how even the most ordinary object could be sanctified by its presence in a healing sanctuary.

Introduction

Healing sanctuaries were amongst the most popular churches in Late Antiquity. Some attracted visitors from distant lands, others served the needs of local communities. Compared to other churches, healing shrines were never empty. Night and day, people lived in the sanctuary, some hoping for a cure, others attending the needs of the sick, others still performing the liturgy. In order to accommodate such a diverse group of people, healing sanctuaries included many different types of building: a church, an atrium, and porticoes were the basic elements. A baptistery and residences either for the clergy or for the visitors were also necessary and common. In or around the sanctuary, monastic dwellings, smaller churches, a bathhouse, shops, workshops and housing for artisans might complete the compound. In such a place, pilgrims could come and pray, buy food to eat on the spot and buy souvenirs, the famous flasks or ampullas being the most popular objects to bring home.[1]

A great variety of people made these shrines buzzing places, a testimony to the success of the cult of the saints, and a testimony as well

[1] Grossmann (1986), Dassmann (1995), Sodini (2001).

L. Lavan, E. Swift, and T. Putzeys (edd.) *Objects in Context, Objects in Use* (Late Antique Archaeology 5 – 2007) (Leiden 2007), pp. 625–654

to human misery. On an ordinary day, one could see members of the clergy and sanctuary officials welcoming pilgrims and visitors, offering prayers to God and organising life in the sanctuary. One could watch lay helpers, the *philopones*, attending to the poor, e.g., to those among the sick who did not come accompanied with servants or with compassionate family members. One could hear the moans of the sick, some in pain, others, crippled, some staying for a short time, others, settled there for years. Rich or poor, very young, middle aged or old, the residents of a healing shrine settled in the sanctuary, and tried to create a lifestyle appropriate to their social status. When they intended to stay for a while, they brought with them bedding, food, gifts and all the objects that they deemed necessary for their comfort. In a healing shrine, the objects were varied and prosaic. The wealthier the sick were, the more objects they brought along, to ease their time of residence in the sanctuary. They also came with family members and servants attending them, and sometimes even with their own personal physician. All of these helpers also settled in the sanctuary and made sure the needs of the sick were taken care of. Add to this group pilgrims and their escort, healthy people coming to worship the saint and bring home some of his or her healing power, and regular visitors living nearby, and you have a very diverse group of people. It is extremely difficult to evaluate the number of residents inside a healing shrine at any time, but it is clear that successful shrines were extremely busy places.

Compared with ordinary chapels, healing shrines made a specific impression on visitors. Long before you reached the saint's tomb or reliquary, your eyes would have met with bedding, crutches, brooms and buckets. When you entered the church itself, ex-votos would have attracted your attention. They celebrated the saint's powers and they were as much an element of church adornment as the liturgical paraphernalia, lamps, curtains, tables or reliquaries. Early in the morning, you would have been able to see the sick lying everywhere, and the churchwarden waking everyone up, a censer in his hands. When you entered an important Christian basilica in the 6th c. A.D., you would have smelt the lingering odour of incense, caught by the numerous curtains and hangings. When you entered a healing shrine, the odour of incense would have been mixed with the stench of the patients, who had slept in the church. Most, if not all major churches also had their poor, their sick and their crippled begging at the door or praying to the saints in order to be healed, but what made healing shrines different was essentially the scale of the phenomenon. They had resident patients, waiting to be cured. Faith-healing was their calling.

In order to recapture the ambience of a healing sanctuary during the last centuries of Antiquity, we are greatly helped by miracle stories, called *Thaumata* in the Byzantine world, and *Libri miraculorum* in the Latin world. These books boast about the healing abilities of the saints they praise. They also give an explanation for their apparent failures to heal, revealing either the hidden sin of the sick or the offence given to the saints by the lack of trust in their ability. They compile edifying true life stories, displayed in short tales. Objects play an important role: they provide the story with distinctive features and a touch of concrete reality. All of these stories would appear monotonous, without such precise contextualising details. Unlike panegyrics (formal public speeches in high praise of a person or thing), *ekphraseis* (graphic descriptions of a visual work of art) and pilgrims' travel reports, miracle stories do not emphasise the beautiful or the spectacular in the shrine. They also seldom describe the place the way *ekphraseis* do. Yet, they help to bring objects to life, for example, those unearthed in archaeological discoveries,[2] and which museums now offer, cleaned and gleaming, to the gaze of their visitors.

The purpose of this paper is to study the objects seen by a pilgrim coming to a healing shrine. It offers a tour of such a shrine at the twilight of Antiquity, mainly based on Sophronius' *Thaumata*, a collection of miracles attributed to the saints Cyrus and John, two saints called '*anargyroi*' because they used to heal the sick without asking for money, unlike the physicians of their time. Before he became bishop of Jerusalem in A.D. 634, Sophronius wrote the *Miracles of the saints Cyrus and John* (BHG 477–479). He wished to thank the saints after he himself had been cured of an ophthalmic disease.[3] His intention may also have been to promote this Chalcedonian healing sanctuary, far less popular than the monophysite shrine of Saint Menas, on the other side of Alexandria.[4] Located in Menouthis, a site not far from Alexandria and known, in the past, for another famous healing shrine, that of *Isis medica*, the Christian shrine has disappeared under the sea. Yet, the numerous and detailed miracles which took place in the late 6th and early 7th c. allow us to glimpse the life of a healing sanctuary.[5]

[2] For ordinary objects, see Winlock and Crum (1936).
[3] Marcos (1975).
[4] Montserrat (1998); Papaconstantinou (2001a) 135–36; Tacaks (1994) 489–507; Gascou (2006).
[5] Talbot (2002).

In order to make comparisons with other healing shrines of the same period, the following texts have also been used:

– The *Miracles of Saints Cosmas and Damian* (BHG 385–390), written anonymously in Greek and compiled some time before Sophronius' death (the author cites some of the miracle stories of the most ancient collection of the *Thaumata*).[6] The miracles take place in Constantinople, where the cult of these two '*anargyroi*' saints started to develop in the 5th c.[7] The shrine remained successful after the 7th c. and other collections of miracles performed by the saints were compiled in the Byzantine period.[8]
– The *Miracles of Saint Thecla* (BHG 1717)[9] were written in Greek during the 5th c., probably by an ancient rhetor, who had become a cleric, and who had access to the library of saint Thecla's sanctuary, located in Asia Minor, at Meriamlik in Isauria, a place close to Seleukia.[10]
– The *Miracles of Saint Menas*[11] are preserved and edited in Coptic,[12] in Arabic,[13] and in Greek (BHG 1256–1269). Some of the miracles are attributed to the patriarch of Alexandria, Timothy, who died in A.D. 477.[14] The healing shrine of Saint Menas was so popular that it gave birth to a small city, located west of Alexandria, in the Mareotis region. The sanctuary of Saint Menas has been in the process of excavation since 1908.[15]
– The *Miracles of Saint Artemios* (BHG 173),[16] a collection of 45 miracle stories in Greek, was compiled between A.D. 658 and 668 in Constantinople.[17] The miracles took place in the church of Saint John the Forerunner, in the Oxeia neighborhood of the capital city.
– The *Miracles of Saint Demetrius* (BHG 499–523) were written in Greek, in Thessalonika, with the oldest collections being of 7th c. date.[18]

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[6] Deubner (1907); Festugière (1971) 97–237. I have not used the collection edited by Rupprecht (1935).
[7] Lopez Salvá (1997).
[8] Festugière (1971) 85–95.
[9] Dagron (1978). On Thecla, see Davis (2001); Johnson (2006).
[10] Herzfeld and Guyer (1930).
[11] Maraval (2004) 319–20, n. 71.
[12] Drescher (1946).
[13] Jaritz (1993).
[14] Pomjalovskij (1900) 62–89; Detorakes (1995).
[15] Kaufmann (1908); Papaconstantinou (2001a) 146–54; 348–49.
[16] Crisafulli and Nesbitt (1997).
[17] Haldon (1997).
[18] Lemerle (1979).

– The *Libri miraculorum* of Gregory of Tours, who was bishop from A.D. 573 until A.D. 593/94, report, in Latin, the miracles performed by many saints, among them Saint Martin of Tours.[19]

Miracle stories are extremely useful to reconstruct ordinary objects present inside churches and people's attitudes towards these objects. The first miracle story of the *Thaumata* of Sophronius is about a rich but extremely sick young boy, named Ammônios.[20] As usual in this type of source, physicians provided by his father were unable to cure him. The saints, who wanted to cure the gangrene of his soul as well as that of his body, decided to humble him first and ordered him to sweep the floor in front of their tomb. With the exception of the tomb of the saints, onto which the father of the young boy pours bitter tears, the first object that we encounter in this compilation of miracle stories is a broom! We are directly thrown into the world of healing shrines, where prosaic objects clearly play their part.

While *ekphraseis* will dwell on the beauty of a shrine and describe the glittering objects treasured inside a church, miracle stories reveal the non-glamorous side of life inside a healing sanctuary. They show us the horrors of human misery and decay, in order to impress on the readers the powers of the saints. It seems important not to turn our head in disgust, or the page in a hurry, when the descriptions become too realistic, and when the narrator dwells on the sights and smells of these 'miracle courts'. If we make the effort to 'walk in the mire'[21] with the purulent sick of Late Antiquity's healing shrines, we may get a more accurate glimpse and a less sterilised notion of what late antique shrines looked like. When combined with what we know about liturgical objects and church furnishings from other sources and from archaeological data, these miracle stories allow us a far more complete picture of late antique churches. While art historians have provided us with a number of excellent descriptions of the liturgical objects present in a late antique church,[22] with surviving examples put on display by museums such as the Walters Art Gallery in Baltimore, the Metropolitan

[19] Krusch (1885); Rousselle (1990).
[20] Sophron. *Narr. de mir. Cyr. et Joh.* 1.7.
[21] Oscar Wilde, *An Ideal Husband*, v. 357: "He walks in the mire. Of course I am only talking generally about life."
[22] Boyd and Mundell Mango (1992); Leader-Newby (2004); Ross (1962) pl. XXV–XXI; Durand (1992); Mundell Mango (1986).

Museum in New York, or the Hermitage Museum in Saint Petersburg, it is important to remember that the first objects visible to the visitors of a late antique healing shrine were not chalices and patens. They were most likely to be buckets and brooms, curtains, beds and covers, crutches and chamber pots. Miracles stories provide us with examples of these ordinary objects, objects that the following generations did not feel to be worthy of preservation, or which were abandoned on the spot when the sanctuary ceased to be inhabited.[23] We can rely on both texts and archaeology to reconstruct what kind of living arrangements the sick and the crippled could make for themselves, with the agreement of the local clergy. Let us pay a visit to the healing shrine at Menouthis and compare it with the Abû Mînâ sanctuary.

The Population of a Healing Shrine

A healing shrine had permanent residents, long-term residents and temporary visitors. Let us start with the permanent residents, who were in charge of the sanctuary or who worked there. Although the saints are the main focus of the miracle stories, members of the clergy are quite often cited. They benefit from the saint's protection and are among those frequently healed. In order not to frighten some patients, the saints sometimes appeared in a dream disguised as a familiar clergyman. Let us start with the healing shrine of Cyrus and John at Menouthis. The head of the Menouthis sanctuary was known as the *oikonomos*. He had a family and a secretary. We hear also about deacons and sub-deacons.[24] Some of those who were healed by the saints remained in the sanctuary, either as members of the clergy or as helpers. Sophronius calls them *philopones*, 'those who like making efforts'; he defines these persons helping the sick in need, as people who were once sick and who, after recovering thanks to the saints, had decided to stay as helpers at the shrine.[25] They often belonged to charitable confraternities, lived more or less ascetic lives, went to church every day and often considered it a religious duty to take care of the sick.[26] Their social origin could be varied, if the P. Lond. III, 1071 b can be

[23] Winlock (1915); Bachatly (1961–81).
[24] Sophron. *Narr. de mir. Cyr. et Joh.* 36.3 (Marcos (1975) 323).
[25] Sophron. *Narr. de mir. Cyr. et Joh.* 35.6 (Marcos (1975) 320).
[26] Wipszycka (1996) 257–278.

generalised: in this association of *philopones*, peasants, merchants, and textile workers such as a seamster and an embroiderer (if πλουμάριος is the equivalent of *plumarius*) are members.[27] In a list of persons receiving wine, *philopones* are cited along with members of the clergy and with *parabalani* and *lecticarii*, who also took care of nursing the sick and burying the dead.[28] In healing sanctuaries, *philopones* were particularly useful to help the very poor among the sick, those who could not move and had no servants or family members to take care of them. They would bring them water, or carry them to the baths or to the church. Sophronios explains that those in charge of the sick used a *phoreion* to transport them inside the sanctuary, when they were too weak to walk. However, it is quite impossible to provide a figure for the number of *philopones* in Menouthis, nor for the other healing shrines. We know that the church of Alexandria had more than 600 *parabalani*, but this was an exceptionally rich church, serving an important population. In A.D. 416, Theodosius first signed a text limiting their number to 500 and their activities as a pressure group. They should be chosen from among the poor people belonging to corporations and not from among the rich. The prefect of Egypt was to receive a list with their names and forward it to the praetorian prefect.[29] Two years later, however, Theodosius raised the legal number to 600 and admitted that the choice belonged to the bishop of Alexandria.[30]

Can we evaluate the number of visitors? The poor came on their own, the very rich people belonging to the higher strata of society came accompanied by prominent figures of the clergy or by local officials, and by a suite of servants, the rich came accompanied by family members and servants.[31] For example, it took 16 men to carry the *philoponos* Menas from Alexandria to Menouthis.[32] He also had his wife with him. In total a party of at least 18 arrived at the shrine. Other pilgrims came with at least two men to carry their sedan-chair. Although we know that many among the sick came with family members, or with

[27] Sijpesteijn (1989).

[28] P. Iand. 154 (6th–7th c. A.D.) published by Hummel (1938), cited and commented in Wipszycka (1996) 265.

[29] *Cod. Theod.* 16.2.42.

[30] *Cod. Theod.* 16.2.43; Delmaire (2005) 205–209. On the *parabalani*, see Haas (1997) 235–38.

[31] Maraval (2004) 128–29.

[32] Sophron. *Narr. de mir. Cyr. et Joh.* 5.3 (Marcos (1975) 250): εἰς κράβατον κείμενος.

servants, this does not help us evaluate the number of sick people present in the sanctuary or residing in the porticos at any time. Miracle stories do not provide us with reliable figures. When they do provide a figure, it is usually impossible to extrapolate. When the saints Cyrus and John tried to convince a reluctant lady to come to their shrine, they showed her the multitude of the sick lying in their sanctuary.[33] But what was a multitude? It seems only fair that, in order to attract other people, Sophronius should boast about the number of the sick cured at a shrine.[34] So, we have to admit that it is quite impossible to figure out the number of visitors at any of the shrines for which we have a collection of miracle stories. We simply know that, at times, the sanctuaries were full of visitors.

Can archaeology help us? A 6th c. mosaic in Jerash has preserved a depiction of the sanctuary of Saint Cyrus and Saint John at Menouthis, but it is quite impossible to deduce the size of the sanctuary from it. It shows a domed church and a monumental door, from which hangs a lamp.[35] An underwater archaeological survey just a few miles off Egypt's north coast revealed the remains of two cities, possibly Menouthis and Herakleion.[36] They were probably submerged after a series of earthquakes, the last of which was followed by a tsunami, which caused devastation in the delta around the middle of the 8th c. Divers working under the direction of F. Goddio of the *Institut Européen d'Archéologie Sous-Marine* and archaeologists from Egypt's Supreme Council of Antiquities located well-preserved remains of houses, and of temples dedicated to the gods Isis, Serapis, and Osiris. They discovered port facilities, fallen monuments, statues, and inscriptions. Ceramics, Byzantine jewellery and coins, found embedded in the sea floor, were brought back to the surface. Some of these objects were identified as possible offerings to the Christian sanctuary of Menouthis.[37] North of a large Pharaonic temple, a large Christian establishment, which could be the sanctuary of the saints Cyrus and John, was located. It was quite close to a dump of statues: "Between this magnificent monument and the Christian

[33] Sophron. *Narr. de mir. Cyr. et Joh.* 9.5 (Marcos (1975) 258): τῶν ἐν αὐτῷ κατακειμένων ἀσθενῶν τὸ πλῆθος ἐδείκνυον.

[34] Déroche (1993); Maraval (1981).

[35] Crowfoot (1931) pl. VII drawing by J. Reich, reprinted in Pringle (2002) 180.

[36] A map of the region east of Alexandria, with the ancient and modern coastline shown, locates Menouthis underwater; Goddio and Clauss (2006) 200. The site of Abukir preserves the memory of Saint Cyros (Kuros) in its name.

[37] Y. Stoltz, "Temples and workshops", in Goddio and Clauss (2006) 258.

architectural complex was a waste dump where statues were thrown, probably to be cut up and reused as raw material. The statues from the era of the last indigenous dynasties as well as the Ptolemaic and Roman periods are remarkable for their quality".[38] The identification of this large complex with the healing shrine of Menouthis is based on a reference in Rufinus' Church history: 'flagitiorum cavernae, veternosa busta dejecta sunt, et veri Dei templa Ecclesiae celsae constructae. Nam et in Serapis sepulcro, prophanis aedibus complanatis, ex uno latere Martyrium, ex altero consurgit Ecclesia.'[39] ('The shameful dark places and the old tombs have been rejected and the temples of the high church of the true god have been constructed. Indeed, in place of Serapis' sepulchre, where the profane buildings have been erased, on one side a martyrium is raised and a church on the other side'). Rufinus does not say anything about Cyrus and John, but he writes about a settlement close to Canopus, which could be the healing shrine.

Excavations at the shrine of Saint Menas have revealed a grand sanctuary and the identification of the site is not problematic.[40] The success of the pilgrimage to Abû Mînâ is quite visible in the extension of its churches. First, a small oratory was built during the 4th c. above a *hypogeum* (a tetrapylon with a small dome), then a bigger church replaced the oratory during the 5th c. (a three aisled basilica), and 6th c. additions made it even larger. About the same time (5th c.), another church, the so-called Great Basilica, was built at the eastern end of the burial church, above a previous structure. A three aisled structure, the Great Basilica measured 67 m by 32 m. Its wide transept was 50 m long and 20 m wide. It enabled large crowds to gather around the altar, located at the crossing of the transept and the nave. Four columns supporting a canopy marked the position of the altar. Eventually, the burial church and the Great Basilica came to be joined, transforming the complex into a very impressive one.

It can be argued that the size of a church is more revealing of the wealth of donors than of the actual number of visitors. The scale of the surrounding buildings, especially those built to welcome pilgrims, is a more objective witness to the success of the sanctuary. As a pilgrimage site located between Alexandria and the Wadi Natrun, the

[38] Goddio and Clauss (2006) 88–89.
[39] Ruf. *HE* 2.27, *PL* 21, c. 535–36.
[40] Grossmann (1986); (1998a) 281–89; (2002) 489–90.

oasis welcomed numerous visitors, who needed food and lodgings, inns (*pandocheia*), hospices (*xenodocheia*), and hospitals (*nosokomia*). Buildings surrounding the main church were erected to house these pilgrims between the 5th and 7th c. A large two-storeyed exedral building next to the tomb church probably served as a residence for the sick and could accommodate large numbers.[41] It is likely that those who could move were given a room on the second floor and the others were on the first floor. This is where the sick among them lived, while waiting for a place in the church at night time. They hoped to be cured by the saint, usually through his healing oil or waters. It has been argued that it was probably expensive to reside there and that it was reserved for the wealthy. Poorer sick people probably stayed further away, in hospices, *nosokomia*, and diverse forms of charitable institutions dispersed through the city.[42] This is a conjecture, however, since no inscriptions identifying these types of buildings have been found. Excavations of a hospice at Dongola allowed B. Żurawski to propose 24 as the number of patients, a number he compared to the 50 patients of the Pantocrator Hospital in the Middle Ages.[43] The exedra in Abû Mînâ must have welcomed from 20 to 40 people. A small city of 700 to 1,000 inhabitants grew out of the success of Menas to attract pilgrims.[44] As R. Alston notes, the prosperity of Abû Mînâ may well have generated rural development in the area, and along the route from Alexandria.[45] The permanent local population living close to the sanctuary consisted of clerics and servants of the church, of monks living in nearby monasteries, of peasants working in the oasis, of merchants selling their wares,[46] and craftsmen producing the famous Menas flasks.[47] K. M. Kaufmann, who discovered the baths at Abû Mînâ, was quite enthusiastic when he imagined hundreds of priests and thousands of shopkeepers, but it is certain that large numbers of visitors must have come to the shrine.[48] Saints *Lives* are even more enthusiastic on the success of the shrine. For

[41] Grossmann (2002) 233.
[42] Miller (1985).
[43] Żurawski (1999).
[44] Map in Grossmann (1998b) 273. Kosciuk (1998) offers a figure between 700 to 1000 inhabitants for this city in the early Middle Ages. On houses, see Alston (2002) 109.
[45] Alston (2002) 362.
[46] Two colonnaded squares were purpose-built market areas; Alston (2002) 317; Kosciuk (1998) 187–224.
[47] Gilli (2002); Witt (2000).
[48] Kaufmann (1921) 13.

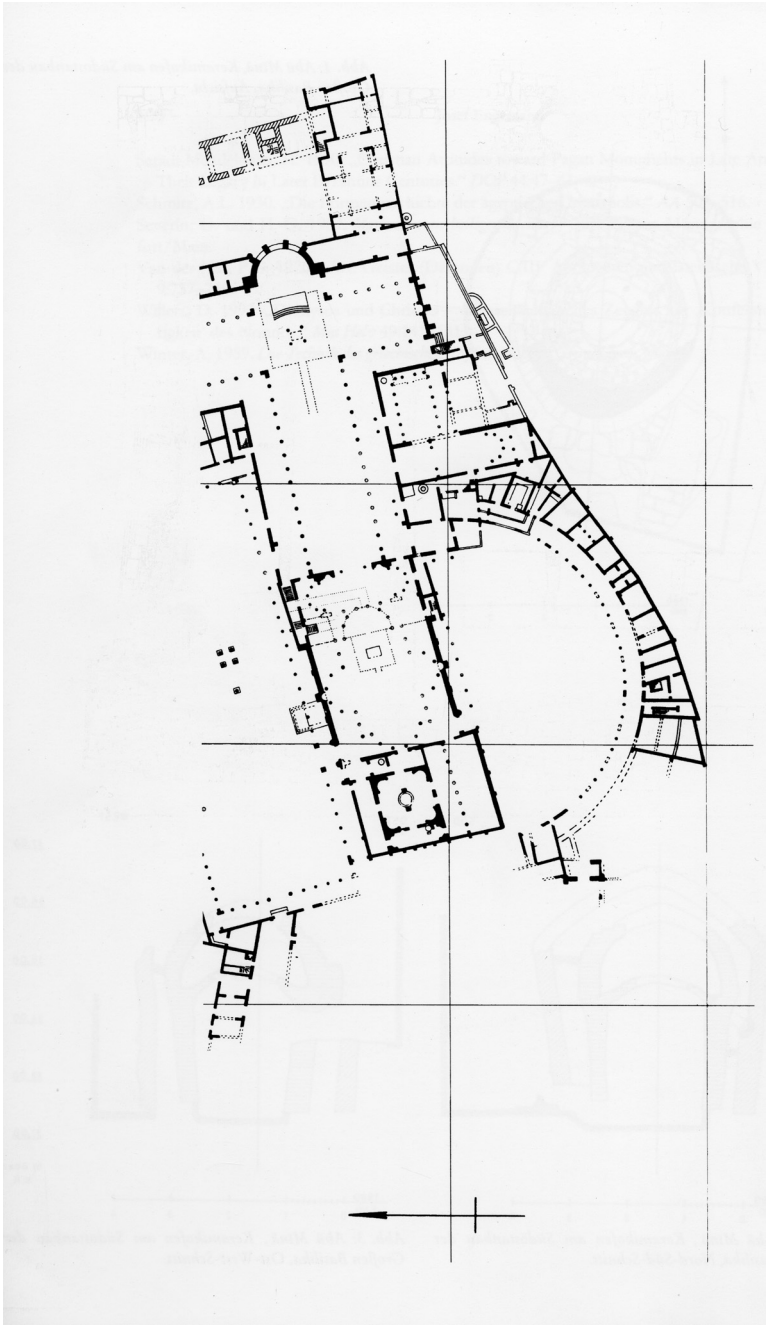

Fig. 1 Map of Abû Mînâ, after Engemann (1998) 110.

example, the Ethiopic life of Saint Menas states that 12,000 soldiers posted by emperor Zeno to guard the sanctuary remained there until the reign of Heraclius.[49]

A testimony to the shrine's success in Late Antiquity is precisely provided by the number and location of ampullas marked in the name of a saint and produced by a specific shrine.[50] Pilgrims were attracted by the saint's reputation as a healer and by the curative properties granted to the oasis waters. They went home with a flask bearing the name of the saint and often his image set between two camels.[51] In Abû Mînâ, pilgrims came mainly from Egypt, but also, occasionally, from further away, as the geographic dispersion of the Menas flasks indicate. Some examples have been discovered in Gaul, in Italy, in the Balkans and even further north, in Hungary and Bulgaria.[52] The Menas flasks often represent the saint between two camels, a way to recall the story explaining the location of Menas' tomb: the two recalcitrant camels carrying his body had refused to budge, once they had reached the oasis. No object marked with the name or the symbol of the saints Cyrus and John has been discovered, which is one of the signs that their sanctuary may have been a place of limited success.[53] Without proper excavations of the underwater site, it may seem unfair to compare the two shrines, yet it has been suggested that christological controversies might be responsible for the difference in fame between the two sanctuaries. It seems that the Miaphysite sanctuary of Saint Menas attracted far more people than the Chalcedonian or Melkite sanctuary of Menouthis.[54] It should be noted, however, that in the early 7th c., the Menas shrine was probably in the hands of Melkites, since it received the visit of John the Almsgiver, patriarch of Alexandria.[55] The shrine was given to the Miaphysite Copts in the middle of the 8th c.[56] The Menouthis shrine may have been founded by Peter Mongus and only later occupied by the Chalcedonians. The tale of a vision attributing its foundation to Cyril of Alexandria may have been written to erase

[49] Kaufmann (1910) 44. On Zeno's interest in the sanctuary and the soldier's task of ensuring security against brigands, see Gascou (2005).
[50] Metzger (1981); Vikan (1982).
[51] Kiss (1989); Kaufmann (1910).
[52] Delahaye (2003); Lopreato (1977) 411–28; Kádár (1995).
[53] Montserrat (1998) 274–75; Papaconstantinou (2001a) 265.
[54] Papaconstantinou (2001a) 146–54; 348–49.
[55] Delehaye (1927) 24.
[56] Meinardus (1992) 172.

the theologically dubious starting point of the sanctuary.[57] However, the impact of these religious controversies may be overrated. It is important to note that pilgrims, and sick people came to famous healing shrines in the hope of a cure from the saint, whether or not they shared the faith of the clergy. They took communion, if they shared their faith, and refused to take it otherwise. There were other forms of communion possible, if you disapproved the theological orientation of the clergy, for example, taking some oil from the lamp burning above the relics. Finally, the Menouthis shrine was founded to counteract the influence of Egyptian deities and of the magical tradition. The two healing saints only had their miracles to show for themselves, as one shrewd lady noticed: there were no records of their trial during the persecution and of their execution.[58] Menas had a more well-established cult and benefited from more developed infrastructures, such as workshops, to publicise his miracles.

Transportation and Lodgings

Arriving very early in the morning at a healing shrine, the first thing one would see would be the number of animals tied outside. Their presence reflected on the success of a shrine, on the number of visitors and on their social status. Pilgrims came to the saints with different means of transportation, depending on the length of their travel, on local habits and on their wealth. Some came to visit the saints on foot, others on horseback, on a donkey or a camel. Wealthy people were carried along, either on a cart pulled by animals, or in a sedan-chair lifted by servants, a *phoreion*;[59] others still in a palanquin. Rich women, in particular, would be carried in a litter.[60] Poor people came on foot.[61] We hear of a mother who walked to the sanctuary with her two children, 12 and 9 years old.[62]

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[57] Gascou (1998) 25.

[58] Sophron. *Narr. de mir. Cyr. et Joh.* 29.

[59] Sophron. *Narr. de mir. Cyr. et Joh.* 5.3 (Marcos (1975) 250): φορείῳ καθήμενος (θρόνος οὗτος καθέστηκεν ἐν ᾧ βασταζειν οἱ νοσηλεύοντες τοὺς ἀσθενοῦντας εἰώθασιν.

[60] Antony of Choziba, *The Miracles of the Most Holy Mother of God at Choziba* (transl. Vivian (1994) 96).

[61] Maraval (2004) 169–70.

[62] Sophron. *Narr. de mir. Cyr. et Joh.* 34.2.

In Egyptian miracle stories, camels and donkeys are the most frequently cited animals.[63] All the necessary equipment for a donkey (packsaddle, bit, bridle, and bell) appears in a funny miracle story concerning a doctor who did not believe that the saints had supernatural powers to cure the sick. He was told that he would only be healed of a painful sickness, if he strolled around the sanctuary carrying a donkey's equipment, and shouting how stupid he was.[64] The literary aspect of miracle stories should not be discounted. Although focused on healing, miracle stories are still good stories to tell and some of them intended to make their hearers (now readers) laugh.[65]

Apart from the animals, visitors could probably have seen carts and wagons of different kinds, also stationed close to the entrance. The sick pilgrims seldom came alone and empty handed. Those who intended to stay in the shrine took with them a number of useful objects, and they also brought servants. Carts were used to carry the necessary bedding and practical objects, as well as those among the sick who were unable to walk or ride, and not wealthy enough for a palanquin. An old man, suffering a great deal, who was discouraged not to receive the benefit of a miracle, decided to leave the sanctuary of Cosmas and Damian. He asked his servant to carry him and his bedding to the harbour. He had brought with him the necessary equipment to stay in the sanctuary, including a bed.[66] Another sick man had brought a mattress to the sanctuary of Saint Artemios. Eventually, pressed by domestic concerns, he decided to leave and although still in pain, he walked away with his bedding.[67]

Miracle stories often give the impression that anyone could enter a sanctuary and practice incubation, but one miracle from Menouthis reveals that it was not so. Patients had to be welcomed by members of the clergy to be allowed to stay inside the sanctuary. Visitors could come and go, but sick residents who came for healing had to be screened, before they could gain admittance. This required the approval of members of the clergy in charge of the sanctuary. The miracles of Saint

[63] Camels: Sophron. *Narr. de mir. Cyr. et Joh.* 13.6; 23.3. Donkeys: Sophron. *Narr. de mir. Cyr. et Joh.* 30.8–11; 33.3.
[64] Sophron. *Narr. de mir. Cyr. et Joh.* 30.8–11.
[65] On laughter as a rhetoric device, see Desclos (2000) esp. 123–31; Trédé, Hoffmann and Auvray-Assayas (1998).
[66] Deubner (1907) 98.
[67] Crisafulli and Nesbitt (1997) 100.

Artemios mention an 'obligatory offering', to be admitted.[68] Desperate but wealthy parents brought a child on the verge of death to the shrine of Saint John the Forerunner, where Artemios practiced healing, and 'after they accomplished the customary rites, they let go of him and withdrew and left him there for 40 days.'[69] These customary rites are not described, but they certainly included organising the life of the child (left on a mattress and unable to move), and talking to the clergy to make sure he would be taken care of.

In Saint Cosmas and Damian's sanctuary in Constantinople, the sick were given a spot in the porticoes, on both sides of the atrium. Apparently, these porticoes had two floors. Those among the sick who could move were placed on the first floor, those unable to move on the ground floor. In this shrine, the sick were protected from the rain by the porticoes but they still lived in the open air during the day as long as they stayed in the sanctuary. In the porticoes, those who wanted some privacy and intended to remain there for some time, set up curtains and created their own chamber. A lady called Martha had come to live there. She herself was sick but she could nevertheless help others. She would give money to the poor and she would invite disturbed women into her curtained recess, on the left portico of the *catechoumenion*.[70] The miracle stories from this Constantinopolitan shrine allow us to glimpse the network of relations and the hierarchy which developed in this small society of sick people.

Catering to the Practical Needs of the Pilgrims

The sanctuary or the *xenones* provided some sort of lodgings, but probably few other amenities, except for water. Providing water was part of the traditions of hospitality, especially in deserts. Bringing water to those too sick to move was a necessary task, especially when they had no servants. Everyone was called to help, even the sick people, as long as they could move. For example, the saints Cyrus and John entrust a very proud man called Ammônios with such a task to humble him: he had to carry on his shoulders not only one, but two jars of water

[68] Crisafulli and Nesbitt (1997) 109; 148: μετὰ τῆς ὀφειλούσης τιμῆς.
[69] Crisafulli and Nesbitt (1997) 199.
[70] Deubner (1907) 129: ἐν τῇ κορτίνῃ αὐτῆς (εἶχεν δὲ τὴν δίαιταν ἐν τῷ ἀριστερῷ ἐμβόλῳ τοῦ κατηχουμενίου τοῦ ἐν τῷ ἐξαέρῳ).

drawn from the fountain.[71] Carrying water was a servant's job, one also undertaken by junior monks.

Access to water was necessary for a sanctuary to thrive. Fountains or wells were built either in the atrium or in an area not too far away. As a result, buckets and jars of water were certainly a given among the objects present in the atrium. Protecting the quality of the water was tantamount to survival. This may explain why we have traces of curtains or doors around some fountains. In the sanctuary of saints Cyrus and John, access to the fountain or to the well was through a door.[72]

Some sanctuaries had a bathhouse attached to them. In the Roman world, going to the bathhouse was a habitual activity for well-to-do urban residents. It was considered necessary for one's health. Charitable fraternities opened bathhouses at specific times to the poor. It is not surprising to find baths in healing shrines.[73] Christ himself had cured people waiting for the miraculous properties of water to purify them and heal them. Taking a bath was therefore common in some healing shrines. At Menouthis, a specific bath seems to have been built for women, unless as in many baths, particular times were offered to them.[74] Patients brought towels and face cloths to the sanctuary, in order to benefit from the baths.[75] We hear of a barber attending the needs of male pilgrims who had not brought the necessary equipment or who were too sick to use it. In general, when families carried a member of their family to a healing shrine because he or she was too sick to be healed by other means, they also brought, if possible, useful equipment such as knives, shaving tools and grooming objects. In Menouthis, chamber-pots were available to those in pressing need, and to those too sick to move, while all the others had a bathroom available to them.[76]

It is likely that pilgrims, intending a short visit, brought food with them. In the *Miracles of Saint Thecla*, two men organise a picnic in the garden of the saint, bringing food and wine with them.[77] When they

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[71] Sophron. *Narr. de mir. Cyr. et Joh.* 1.13 (Marcos (1975) 246).

[72] Sophron. *Narr. de mir. Cyr. et Joh.* 27.6: ὁ δὲ πρωίας εἰς τὴν αὐτῶν πηγὴν ἐξελθών, ὡς ἐκέλευσαν, τῆς θύρας ὄπισθεν εὗρεν σίκυον κείμενον.

[73] Yegül (1995) 352–55. On the healing properties granted to water, see Dvorjetski (1997).

[74] Sophron. *Narr. de mir. Cyr. et Joh.* 9.8.

[75] Sophron. *Narr. de mir. Cyr. et Joh.* 2.4 (Marcos (1975) 247): φακιόλιον = φακιάλον.

[76] Sophron. *Narr. de mir. Cyr. et Joh.* 5.6 (Marcos (1975) 251): εἰς ἀφεδρῶνας ἀλθεῖν.

[77] Dagron (1978) 380–81.

stay for a long time, however, they have to buy food from the nearby shops. We learn from one miracle in Menouthis, that at least one type of bread was baked in a nearby village.[78] We also hear of a sick man who eats chicken in the sanctuary of Cosmas and Damian during Lent. It is quite certain that the clergy of the sanctuary did not provide the chicken; since meat was forbidden during Lent, the saints rebuke the man for this unholy meal.[79] It seems that in the sanctuary of Saint Artemios, located in Constantinople, a communal meal was organised.[80] It is possible that at such a sanctuary, some food was provided.

Food products are cited in the *Miracula* of Cyrus and John: besides chicken, lemon,[81] fig,[82] sesame,[83] honey,[84] mulberries,[85] breads of different kinds,[86] cucumber,[87] myrtle and wine,[88] cumin and salt.[89] Meat is sometimes proposed as a remedy to cure a sick person, including unlikely meats such as peacock meat.[90] In the *Miracula* of the saints Cosmas and Damian, we hear about pork meat (in a miracle about a Jewish woman on the brink of conversion).[91] A deacon of the Menouthis sanctuary had pigs in the courtyard of his house.[92] Animals were brought to the sanctuary and given to the saints as a present. We hear of a lamb given to the sanctuary of Cosmas and Damian,[93] a pig destined for the church at Menouthis,[94] and three pigs given to the shrine of Menas, who saved one of them from a crocodile.[95] They seemed to be roaming freely in the atrium.

From the descriptions we read in miracle stories, we can reconstruct a whole world. Healing shrines welcomed people from different

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[78] Sophron. *Narr. de mir. Cyr. et Joh.* 20.4. On this type of bread, see Gascou (2006a) 77 n. 447.
[79] Deubner (1907) 110–111.
[80] Crisafulli and Nesbitt (1997) 104: κοινωνῆσαι.
[81] Sophron. *Narr. de mir. Cyr. et Joh.* 4.4 (Marcos (1975) 249): ἀπὸ κίτρου μέρος.
[82] Sophron. *Narr. de mir. Cyr. et Joh.* 5.4–5 (Marcos (1975) 250): ἰσχάδα.
[83] Sophron. *Narr. de mir. Cyr. et Joh.* 6.3 (Marcos (1975) 252): ἐκ σισάμου.
[84] Sophron. *Narr. de mir. Cyr. et Joh.* 6.3 (Marcos (1975) 252).
[85] Sophron. *Narr. de mir. Cyr. et Joh.* 10.8: συκαμίνοι.
[86] Sophron. *Narr. de mir. Cyr. et Joh.* 6.3 (Marcos (1975) 252): ἄρτῳ παξαμήτῃ.
[87] Sophron. *Narr. de mir. Cyr. et Joh.* 27.6: εὗρεν σίκυον.
[88] Sophron. *Narr. de mir. Cyr. et Joh.* 25.6.
[89] Sophron. *Narr. de mir. Cyr. et Joh.* 17.3.
[90] Sophron. *Narr. de mir. Cyr. et Joh.* 12.18 (Marcos (1975) 269).
[91] Deubner (1907) 102.
[92] Sophron. *Narr. de mir. Cyr. et Joh.* 11.4.
[93] Deubner (1907) 105.
[94] Sophron. *Narr. de mir. Cyr. et Joh.* 49.2.
[95] Devos (1959) 454–55.

backgrounds. Families, who sometimes left a handicapped or extremely sick person for a long time, certainly had to negotiate with the clergy. Shrines welcomed families who could pay for lodgings and some services, and leave a servant or a close family member with the sick person to take care of the bare necessities of life. They were probably more reluctant to admit very poor people, who could not provide for themselves. In all these sanctuaries, the clergy controlled who was allowed to stay. Sick people were allotted a spot and could be refused on grounds of the lack of space. It was in the interests of the sanctuary, however, to be welcoming, and the miracle stories insist on the generosity of the saints who cured Christians and non-Christians alike.[96] Miracle stories report the conversion of heretics to the faith of the sanctuary, and the conversion of pagans, Jews and Samaritans to the Christian faith. While we may conclude that healing sanctuaries were indeed places to meet people of other faiths, it is also likely that some kind of open mindedness was required on the part of the sick before they were accepted to practice incubation. In regions where churches changed religious affiliation, from a Chalcedonian to Miaphysite creed for example, pilgrims continued to visit the saints, whether or not they agreed with the theological affiliation of the clergy, who took these visits as a means of converting the pilgrims to their creed. In all fairness, miracle stories note the reluctance to convert on the part of many heretics and even report some failures at converting those who had been denied healing. Conversion and healing went hand in hand, not unlike miracle stories in the New Testament. Miracle stories also justify failure in receiving healing from the saints, sometimes precisely on account of a sick person's heretical or pagan inclination.[97]

Healing: Incubation

Members of the clergy offered oil and *kerôtè* to help the sick but desperate patients who expected a cure from the saints. These patients

[96] For example, a Samaritan woman is cured by Saint Menas; Drescher (1946) 119–23.

[97] Sophron. *Narr. de mir. Cyr. et Joh.* 22: the banker Agapios is a cryptopagan and pretends to be a Christian to avoid justice. Sick, he goes to Menouthis, he even takes communion and is struck dead by a demon. The description of the scene evokes an epileptic crisis.

came to a shrine with the hope of being visited by the saints in a dream during the nights spent inside the church, close to the relics. Incubation inside the church at night was the main reason to come to a healing sanctuary.

The sick were not allowed to lie in front of the saint's tombs and reliquary all day. It would have made it impossible for other visitors to approach. They could go inside the church to pray, either during the common times for worship, or for their own personal devotions, but they were not supposed to remain there all day. Only at night were they sometimes moved inside the church, close to the tomb, in order to practice incubation. They slept inside the church, hoping to be visited, in their dreams, by the saints, who would tell them what to do to be cured, or who would touch them and directly cure them.

Incubation was also a matter of negotiation with members of the clergy. The sick, hoping to be visited by the saints during the night, believed that proximity to the relics enhanced their chances of such a visit. Money given to the clergy could help to secure privileged access. Depending on their negotiations, the sick could be allotted a spot inside the church very close to the tomb or reliquary, or at some distance from it. In any case, direct access to the tomb or to the reliquary was usually closed during the night. The crypt at Abû Mînâ, for example, was locked during the night. Early in the morning, when the sun rose, a young reader in charge of opening the crypt found a man inside. He called the doormen, and shouted that this must be a robber, when it was a man in fact miraculously saved by Menas.[98] Access to the tomb of Saint Artemios was also limited at night: 'no one was permitted to sleep below except on Sunday before dawn.'[99] We hear of iron gates set up to protect the relics in Thessalonika.[100] Inside the sanctuary, the sick who were very poor lay directly on the floor, wealthier pilgrims, who had servants to carry their goods, lay on a bed. Sophronius reveals to us how social differences were taken into consideration in placing the sick for incubation: a rich woman had placed her bed right in front of the saint's tomb, while a poor one slept on the floor under the porch.[101] In the *Miracles of Saint Demetrius*, a rich state official, an eparch, is carried into the church by his servant for the night and sleeps on a cot

[98] Devos (1960) 155.
[99] Crisafulli and Nesbitt (1997) 109.
[100] Bakirtzis (1995); Bakirtzis (2002).
[101] Sophron. *Narr. de mir. Cyr. et Joh.* 24.4.

(*camaivstrwto*) set up inside the church. Healed after a vision of the saint, he can walk inside the ciborium, where the image of the saint is kept.[102] An imperial judge, a patrician, sends a sick relative, who invites those in charge of the sanctuary (the *hebdomarioi*) to dinner. They, in return, allow him to sleep by the holy tomb, 'as he was one of the grandees', but they do not grant the same privilege to the Alexandrian actor who came with him to the church.[103]

Inspecting and Cleaning the Church

Every morning, the sick would be awakened and the church emptied so that it could be cleaned. In any church, this was necessary. In a healing shrine, where sick people had slept, it was mandatory. At Abû Mînâ, a routine inspection of the church and an opening of the most sacred area took place every day. It was wise to check that nothing had been removed from the church. Theft was not uncommon.

Cleaning the church must have been a daunting task, when so many pilgrims trod on its floor, and when some of them remained inside the building during the night. The saints sometimes recommended ingesting horrible food in order to produce vomiting. The illness was expelled with the medicine! Against poisons and magical philtres, the saints Cyrus and John prescribed disgusting food, which made the sick vomit the poison with the food. They tended to cure the sick by prescribing remedies similar to the illness, the same by the same, rather than by the opposite, which is what secular doctors did. Cleaning the premises after such miracles was certainly necessary.

Miracles stories hint at what was taking place on a daily basis, yet, they do not provide us with ready answers to the many practical questions that we may have. We hear of brooms, but we are not told who exactly was in charge of this task. Cleaning was sometimes entrusted to children who had been given by their parents to the healing shrines, or who were staying there expecting a miracle.[104] While waiting to be cured by Saint Artemios, a child helps inside the church and assists

[102] Lemerle (1979) 54–55.
[103] Crisafulli and Nesbitt (1997) 111.
[104] Papaconstantinou (2001b).

pilgrims on the occasion of the saint's feast: he takes care of hanging the lamps and helps with the distribution of water.[105]

One of the daily tasks was the cleaning and filling up of oil lamps. A special task, probably entrusted to a member of the clergy, was the cleaning of the lamp or chandeliers placed above and around the saint's tomb. The wax and the oil were granted healing properties. Melted wax, called *kerôtè*, was gathered and offered to the faithful. In Cyrus and John's sanctuary, it was offered every Saturday at 6 o'clock, during the *pannychis*.[106] It was also commonly prescribed by the saints during the visions experienced by those sleeping in their church.[107] The *kerôtè*, very often mentioned in Sophronius' text, as well as in Cosmas and Damian's *Miracula*, was made of wax, or wax mixed with either oil, water or bread. It could be placed on the sick part of the body, or it could be drunk, or eaten. Ammonios' scrofula was cured by using the *kerôtè* mixed with bread to create a plaster.[108] Then, when he was sick again, he was offered a mixture of *kerôtè* and oil from the lamp burning above the tomb as a medicine.[109] In Cosmas and Damian's *Miracula*, it is described as the ointment which heals everything.[110] In the different churches, patients asked for oil burning above the relics and used it as medicine. A sceptical man resolves to trust in Artemios' healing powers and he anoints himself with oil from the lamps burning on the coffin.[111] The oikonomos in charge of the shrine at Abû Mînâ takes oil from the lamp burning before the saint's body in order to make the sign of the cross on a possessed man.[112] The saints frequently healed with the use of matter present in the sanctuary. In Menouthis, the water of the fountain could become the means of healing. This was the case for a man suffering from an ophthalmic disease, who rubbed his eyes with water from the fountain and wiped it away with a piece of cloth. His eye sickness was removed as well.[113] Oil taken from the lamp burning on top of the saints' tomb was a favourite remedy. It cured a man who

[105] Crisafulli and Nesbitt (1997) 190.
[106] Deubner (1907) 175; Festugière (1971) 171.
[107] Sophron. *Narr. de mir. Cyr. et Joh.* 22.4.
[108] Sophron. *Narr. de mir. Cyr. et Joh.* 1.8.
[109] Sophron. *Narr. de mir. Cyr. et Joh.* 1.12.
[110] Deubner (1907) 101: τοῦ πάντα πάθη νικῶντος καὶ θεραπεύοντος φαρμάκου.
[111] Crisafulli and Nesbitt (1997) 196.
[112] Drescher (1946) 119.
[113] Sophron. *Narr. de mir. Cyr. et Joh.* 2.3–4 (Marcos (1975) 247).

after a bad fall had a broken and wounded leg.[114] Food could also be used on wounds. We hear of a mixture of bread, honey and sesame applied to a fistula,[115] pureed vegetables such as peas[116] or lentils,[117] fish,[118] and wine[119] were also used.

Among the means of healing, the eucharist and also blessed bread naturally played a role. We shall not describe liturgical objects, which could be seen by pilgrims, as they were no different from those used in other churches, but communion with the body and blood of Christ was certainly part of the cure provided to Christians sharing the faith of the clergy. Even reliquaries were probably not specific to healing shrines, except perhaps for some particular relics. In Menouthis, pilgrims went and prayed in front the tomb of Cyrus and John. As in any other shrine, a lamp was hanging on top of the tomb, candles were burning around it, but the shrine had something more. The *Miracula* report that a medical instrument called a mele (mhvlh), possibly a probe, was also accessible to the faithful.[120] It is possible that it had once belonged to Saint Cyrus who had been a doctor at Alexandria.

Catering to the Spiritual Needs of the Faithful: Blessed Bread and the Eucharist

The *Miracula* written by Sophronius mention more than once the *phôtistèrion*, where blessed water and consecrated bread were kept.[121] The word recalls those who have received the light, which probably refers to baptism. Allusions to the liturgy are not infrequent. A number of heretics came to the sanctuary. The saints invited them, sometimes even coerced them, to take communion with the Chalcedonian community.[122] For a monophysite, there was no specific rite of apostasy nor any need to rebaptise. The change of creed, the acceptance of Chalcedonian

[114] Sophron. *Narr. de mir. Cyr. et Joh.* 3.3 (Marcos (1975) 247).
[115] Sophron. *Narr. de mir. Cyr. et Joh.* 6.3 (Marcos (1975) 252).
[116] Sophron. *Narr. de mir. Cyr. et Joh.* 8.14 (Marcos (1975) 256); Sophron. *Narr. de mir. Cyr. et Joh.* 68.
[117] Sophron. *Narr. de mir. Cyr. et Joh.* 68.
[118] Sophron. *Narr. de mir. Cyr. et Joh.* 9.11 (Marcos (1975) 259).
[119] Sophron. *Narr. de mir. Cyr. et Joh.* 9.11 (Marcos (1975) 259).
[120] Sophron. *Narr. de mir. Cyr. et Joh.* 28.11.
[121] Sophron. *Narr. de mir. Cyr. et Joh.* 36.14.
[122] Sophron. *Narr. de mir. Cyr. et Joh.* 36.7–14.

theology, took the form of accepting communion consecrated by a priest of the Chalcedonian faith.[123] Refusing to take communion amounted to revealing a heretical inclination, or worse crypto-paganism. Heretics who refused to take communion, and still visited the sanctuary of the saints Cyrus and John, clearly a Chalcedonian shrine in Sophronius time, could benefit from another form of communion. They drank the oil burning on top of the saints' tomb. Sophronius admits that this is sanctified oil, yet he considers it in no way equivalent to consecrated bread.[124] The *Miracula* give the impression, once more, that anyone could come and help themselves to this oil. Yet, we learn that access to the tomb and to the oil was through an iron gate, which was not always open.[125] A deacon was in charge of overseeing what was going on in the sanctuary, and probably supervised the use of this sanctified oil as well.[126] In Abû Mînâ, the *oikonomos* was also in charge of the oil. Since this was the main remedy, it is only natural that its distribution was supervised.

Communion with the consecrated bread naturally took place during the liturgy, but also at other times. The sick were sometimes prescribed communion. Heretics were invited to take communion on their conversion. They took communion at the time of their acceptance of the Chalcedonian faith and not during the *synaxis*. At that time, they were brought to the *phôtistèrion*, where the consecrated bread was kept. The *Miracula* do not describe the way communion was received, yet seem to indicate clearly that the communicants received communion from a member of the clergy. For all these events, consecrated bread was kept after the consecration for the faithful in need of communion. There is no mention of last communion in Sophronius' *Thaumata*, where people dying are few. Those who were dying were apparently sent away, rather than left to die in peace in the sanctuary. The reputation of a healing sanctuary might be at stake if too many people were to die there. Dying there meant that the saints had refused to cure you. A reason had to be found for such neglect, usually the cause was either crypto-paganism or entrenched heresy in the patient. In one case, a woman had done nothing against the saints, and was nevertheless dying. She was sent home. In the Cosmidion, a woman is healed but then she dies soon

[123] Sophron. *Narr. de mir. Cyr. et Joh.* 36.22; Caseau (forthcoming).
[124] Sophron. *Narr. de mir. Cyr. et Joh.* 36.15.
[125] Sophron. *Narr. de mir. Cyr. et Joh.* 36.15.
[126] Sophron. *Narr. de mir. Cyr. et Joh.* 36.13.

after and the shrine provides all the objects necessary for the funerary procession.[127] It is clear that such instances were not rare, even if the purpose of the *Miracula* is to recount healing miracles.

When the saints had granted one of their miraculous cures, the local clergy liked to record the cure, or even keep some material proof of it, sometimes of a kind which disgusts the modern reader. For example, when the sick young man of the first miracle story obeyed the saints Cyrus and John and swept the floor in front of their tomb, his scrofula burst open and fell to the floor. The people in charge of the sanctuary, members of the clergy presumably, counted 67 of them and decided to hang them for many days in front of the tomb, in order to show the power of the saints.[128] This is one type of object that archaeologists will not find! What they may find are the ex-votos which often represented the healed part of the body.[129]

When the sick were cured they often wanted their miracle recorded. One common way to do this was to give an ex-voto to the church. These could take the shape of small wooden pictures as in the sanctuary of Cosmas and Damian. On these objects, a scene depicted the part of the body which was sick, and the manner in which it was cured by the saints. A man very puzzled by the vision of the saints he had received, went around the Cosmidion to find if any such thing had been requested of another patient. He was to take pubic hair from 'Kosmas' in order to be cured. It appeared that 'Kosmas' was the nickname of a lamb given to the sanctuary.[130]

The miracle story from this shrine, in which the man looks at each of the pictures to find what the saints are asking of him, reveals that such *pinakes* were an ornament of the church.[131] They certainly played an important role in promoting the healing abilities of the saints and formed part of the decor in the healing sanctuaries of Late Antiquity, as they had in healing temples in Antiquity. Writing about the miracles and circulating the stories was an other means of promotion for healing shrines.

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[127] Deubner (1907) 129: κράββατον, κηροὺς.
[128] Sophron. *Narr. de mir. Cyr. et Joh.* 1.9 (Marcos (1975) 245).
[129] Vikan (1995); Mundell Mango (1986).
[130] Deubner (1907) 105: περιήρχετο πάντα τὸν οἶκον τῶν ἁγίων, πειρώμενος ἐν εἰκονιδίῳ.
[131] Deubner (1907) 105.

Conclusion: Attention to Objects

Texts such as the *Miracula* of the saints Cyrus and John reveal a specific attention being paid to objects. Some of the objects were cited because they enhanced the decor, others because they were instrumental in the healing process devised by the saints. Thus, while some objects were simply useful, others were invested with healing powers. Through words, they could be consecrated and made portents of the sacred. Through contact, they could also be empowered to work miracles. Any object could serve in the cure, because the saints were deliberately unconventional in their healing methods, yet some objects, such as the *kerôtè*, were used more than others in the healing process. All of the objects given to a sanctuary were somehow touched by the saint's *virtus*, yet some were better conductors of this power than others.

Religious sources for Late Antiquity reveal that objects placed inside churches were granted a form of respect, which was not wholly linked to their intrinsic value. There was a kind of sacredness inside the church, which spread to prosaic objects. This is well attested by John Chrysostom' sermons.[132] Objects could even participate in the competition between churches. In the Plerophoria of John Rufus, a collection of miracle stories written to convince the reader about the evil of the Council of Chalcedon, Christ himself visits a church and complains about the unkempt objects in it. The miracle was reported by a certain Peter who

> said that in the church of the Probatic Pool, where the Lord cured a cripple, a young reader among those in the staff, who was on his day to keep watch on the church, rose early in the holy place, saw Jesus, our Lord and God, enter in glory surrounded by saints. When Jesus saw that the lights of the church were either out or poorly set up, he cried out: 'What shall I do to those to whom I gave such goods, oil and wine, and the other useful objects?'[133]

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[132] Joh. Chrys. *Hom. in Matth.* 32.6, *PG* 57, c. 384: Καὶ γάρ ἡ τράπεζα αὕτη πολλῷ τιμιωτέρα καὶ ἡδίων, καὶ ἡ λυχνία τῆς λυχνίας. Καὶ ἴσασιν ὅσοι μετὰ πίστεως καὶ εὐκαίρως ἐλαίῳ χρισάμενοι νοσήματα ἔλυσαν. John Chrysostom, comparing the sanctity of the objects present in the church with those found at home, argues that even the lamps of a church are superior to those burned at home as is shown by the great number of the people who are healed of their illnesses after receiving an ointment made from the oil of church lamps.

[133] Joh. Maiuma. *Pleroph* 18, *PO* 8.1, 35–37.

The rest of the story is about the liturgical vestments that Jesus finds unkempt in the wardrobe of the vestry. Of course, the purpose of the story is to denounce the Chalcedonian clergy in charge of the church, but as Jesus himself cares about the display of lamps, it reveals that taking care of a church included paying attention to objects. However, even dirt can be useful in miracles stories: Saint Thecla explains that her treatment is not expensive, nor similar to what is proposed by the Asklepiades. She recommends taking some dirt from the chancel barriers and using it as a medicine.[134]

What was an acceptable level of dirt and what was not in a healing shrine? The dust of the saints was precious for making medicine in some sanctuaries, so we know that dusting the reliquary or the tomb was out of the question! Or was it? We can safely assume that these healing shrines did not shine like some of the chapels of early twentieth century convents, smelling of polishing wax. Did they stink? It is highly probable. The narrator of the *Miracula* sometimes provides indications about the bad smell.[135] The stench of the sick is a *topos* based on the story of Job; it is also the reality of infected wounds. One indication of the need to dispel the stench is the daily censing of the sanctuary of Menouthis by the steward (οἰκονσμο), a censing which seems to have no liturgical background.[136] Sophronius does not spare us sordid details, a fact which certainly reveals the cultural distance between his world and ours.

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[134] Dagron (1978) 340: τὸν ῥύπον.
[135] Sophron. *Narr. de mir. Cyr. et Joh.* 36.5: καὶ πᾶσα δυσωδία ἐκχυθεῖσα τὸν οἶκον ὅλον ἐπλήρωσεν.
[136] Sophron. *Narr. de mir. Cyr. et Joh.* 31.4: the steward censes the church, in front of the sick people. Among them, is Theodoros who is sitting. The steward goes to the *phôtisterion* where the Eucharistic reserve is kept. If this episode was taking place during the synaxis, Theodoros would be standing. Nothing was wrong with his legs. Sophron. *Narr. de mir. Cyr. et Joh.* 22.7–8: the steward offers incense to God, going through the sanctuary every day at the same time, which seems to be the early hours the morning. The purpose of such a censing, apart from the religious offering, is indeed to refresh the atmosphere of a place where a lot of people slept together.

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Fig. 1. Map of Abû Mînâ, after Engemann (1998) 110.

MILITARY SPACE

SOLDIERS AND SPACES: DAILY LIFE IN LATE ROMAN FORTS

Andrew Gardner

Abstract

Roman forts in the north-western part of the empire were vibrant, dynamic environments through which different groups of people moved, and in which they interacted. They are thus essential contexts for the understanding of broader changes in the Roman world. In Late Antiquity, the forts of Britain and northern Gaul show clear signs of the kinds of changes that overtook these provinces in the 5th c. A.D., at the same time as indicating long-term continuities in daily practices. In this paper, the evidence of both settlement and burial deposits from such sites will be explored to try and capture something of this balance between tradition and transformation. The emphasis will be on the vital importance for archaeologists of understanding the different temporal scales at which various past processes occurred.

Introduction: The Archaeology of the Everyday

> To the ordinary man [...] This anonymous hero is very ancient. He is the murmuring voice of societies. In all ages, he comes before texts. He does not expect representations. He squats now at the center of our scientific stages.[1]

This paper is concerned with how we might go about understanding something of everyday life in Late Roman military communities. As a starting point, then, we need to establish what is meant by 'everyday life', and perhaps more importantly why we might want to understand it at all. The first question is not quite as straightforward as it sounds. The 'everyday' is currently a fashionable subject across the social sciences, but particularly in regard to modern, Western society, as an extension of sociological methods into the study of popular culture,

[1] de Certeau (1984) v.

L. Lavan, E. Swift, and T. Putzeys (edd.) *Objects in Context, Objects in Use* (Late Antique Archaeology 5 – 2007) (Leiden 2007), pp. 657–683

including its material forms, and developing in part under the influence of postmodernism.[2] Such work is concerned to penetrate the oft-ignored mysteries of the mundane features of modern culture. In archaeology, one might think, this kind of approach is rather unnecessary, given that—like anthropology—we are used to dealing with other cultures which are somewhat mysterious to begin with, and so are less inclined to ignore the routines of simple things like eating, travelling, working and dwelling. Yet is this really the case? It may be a long time since archaeologists exclusively focused on the remains of elite culture,[3] but is a more democratic archaeology the same thing as an archaeology of the everyday? That would seem to be the implication of the quote with which this paper begins. M. de Certeau dedicates his book *The Practice of Everyday Life* to "the ordinary man" (and, I would hope, woman). It is also characteristic of some archaeological work on hitherto-ignored communities, in North America, for example.[4]

Important as this point is—that archaeologists should pay attention to the lives of all members of past communities, and not just the most visible—I think it only grasps part of what we mean by 'the everyday'. Regardless of their class or status, everybody has an 'everyday'. It may involve different kinds of material culture, different kinds of mobility, and different activities, but all human lives have some structure of routine. These routines are essential not just to organised social life, but to the ongoing sense of self-identity that has been described as 'ontological security': a stable sense of being.[5] 'Routine' does not account for everything that people do, of course, but variations and exceptions to the norm stand out precisely because they are not part of that repetitive structure of activity—they disrupt its flow.[6] As well as describing a particular kind of action, 'routine' usually also has a connotation of the way such actions are performed, that is, without much in the way of conscious thought. Again, this contrasts with situations where the options of 'what to do' are discussed and analysed. These might typically be novel and unfamiliar, but it is entirely possible for people to reflect upon routines, and perhaps attempt to change

[2] E.g., Attfield (2000); Chaney (2002); Dant (1999); Gardiner (2000); Highmore (2002).

[3] See Hingley (2000) 150 for information relating to excavation practice with regard to Roman Britain.

[4] Deetz (1996).

[5] Giddens (1984) 23; cf. Whittle (2003) 22–25.

[6] Highmore (2002) 1–16; Mead (1934) 347–48.

them. In some ways this is the job that social scientists writing on the modern 'everyday' are performing, but it is certainly something that people engaged in routine activities of their own have the potential power to do as well, particularly when prompted by encounters with different ways of living.

This carries us to the heart of why the study of 'everyday life' is so important. It is not just about democratising archaeological representations, or about adding endless details of how real people carried on their mundane existences in different contexts. It is rather because the often unreflective character of routines makes them essential to the continuous reproduction of social norms and ideologies, including differences in power between classes, genders, or other identity-groups. At the same time, the potential for routines to be opened up for scrutiny by the people performing them, or to change subtly and unintentionally from one repetition to another as people adapt their lives to changing circumstances, underpins much of the broad social change in any context.[7] Routines are thus essential to the reproduction of, and change in, societies like those we are interested in studying in Late Antiquity. Understanding their role, as the nuts and bolts of 'everyday life', is the key to understanding the processes which characterise this period, defined as it is by a fluid mix of continuity and change. In this paper, I will explore how this mix developed in military communities. These were representative to some degree of the structures of the Late Roman state, and thus surely played an important role in the wider structuration of social life in the late antique West.

Issues in Later Roman Military Archaeology: the Need for an 'Everyday' Perspective

Before developing this perspective across several case-studies, it is necessary to review briefly some of the key issues in Late Roman military archaeology as an argument for the development of an 'everyday' perspective on the subject. The attention of scholars interested in the Roman military has traditionally been focused on the earlier part of the Roman imperial period, an interest also shared by (or perhaps prompted

[7] Given (2004) 13–17.

by) wider audiences.[8] What studies of the later Roman military there are have tended to follow the template established by the major works on the armies of the Principate, concentrating on structural features of organisation (recruitment, ranks, conditions of service), weapons, and fortifications.[9] These are all, of course, important concerns in terms of the basic categories of information that the documentary sources and artefactual material (seen from a typological point of view) most readily provide. They do, however, tend to perpetuate a 'top-down' view of life in the Roman military, and of its role in imperial politics and in cultural change. The 'top' in this case refers both to the upper echelons of the ancient military hierarchy, and to the status of scholars looking down upon the military as an organisational problem isolated from the rest of Roman society. Indeed, this is not an accidental correlation, given the military background of several major students of the Roman army (e.g., Eric Birley, an important 20th c. figure in the study of frontier systems in Roman Britain).[10] Even if one looks to Roman military archaeology in its broadest possible chronological scope, then, there has been little interest in what has been described above as 'everyday life', not least because of a pervasive sense of the uniformity, and therefore unimportance, of military life throughout history.[11]

If one thing does distinguish studies which have a specific focus on the Late Roman military, it is the scenting of these standard features of Roman military archaeology with the whiff of decay. Later Roman military history, especially when concerned with the Western empire, has been preoccupied with the question of what role change in the armies played in the 'decline and fall' of the Roman state in this region, whether advocating a strong or weak connection.[12] Again, there is no doubt that the social processes concerned here are important, but there is a problem with taking what is essentially a hindsighted perspective when trying to examine the lives of people in their present.[13] Even one of the

[8] If, that is, the number of 'high' imperial re-enactment groups is any gauge; for listings see e.g., http://www.reenactor.net/Ancient/roman/roman_main.html.

[9] See e.g., Southern and Dixon (1996); Treadgold (1995); cf. James (2001). For the Principate see e.g., Watson (1969); Webster (1985); both have only perfunctory sections on the social role of soldiers.

[10] James (2002) 10–26.

[11] See e.g., Peddie (1994) for an extreme example of this attitude; for alternative viewpoints, see van Driel-Murray (1995); Goldsworthy (1996); James (2002).

[12] E.g., Elton (1996); Nicasie (1998).

[13] Cf. Gardner (2004) 12.

most concerted attempts to address the complex and multi-dimensional social lives of soldiers in this period, R. Macmullan's *Soldier and Civilian in the Later Roman Empire*, is permeated with the idea of 'degeneracy'.[14] While opinions about efficiency are clearly a central theme in the work of some later Roman writers, most notably Vegetius, these are equally clearly not to be taken at face value, and are to some extent characteristic of earlier writing on the military too.[15] In this paper, I hope to demonstrate that a 'bottom-up' interpretation of the daily routines of soldiers, and of their significance to the unfolding processes of change in Late Antiquity, cannot proceed from a backward-looking perspective concerned with judgement rather than understanding.

While such an interpretation will shed light on the questions that have dominated the study of the Late Roman military, it does not begin with them. Rather, grounding the archaeological picture of this period in the everyday lived experience of people inhabiting fort communities—which, of course, includes many people other than soldiers—offers a novel perspective on the processes which later writers (either in the 2nd half of the 4th c. A.D. or the 20th c.) would come to refer to as 'decline', 'barbarisation', or 'transition'. This is a perspective which sees change in its context, that is, the context of the routines which were established earlier in the Roman period and continued, and which therefore accepts that all 'periods' are a mixture of tradition and transformation.[16] We thus exchange the "prism of decline and fall"[17] for what D. Miller has called the "prism of the local".[18] In doing so, however, we may actually get closer to those very processes of change whose understanding has eluded scholars of Late Antiquity for so long. This necessitates a focus on particular places, and the ways these were structured materially, temporally and socially by the people inhabiting them. In this paper, I will be using examples from the Late Roman West, and more particularly from Britain and Gaul. These offer well-excavated contextual data of the kind needed to pursue this project, as well as being at the centre of their own individual controversies

[14] MacMullan (1963).
[15] Vegetius (transl. Milner (1993)); for a gendered perspective on similar themes in an earlier context, see Alston (1998).
[16] Gardner (2002); Mead (1932); cf. Gutteridge (2004) 136–37.
[17] Whittow (2003) 408.
[18] Miller (1995).

about continuity and change in the later Roman period.[19] As we will see, these controversies—like those at larger scales—can be profitably re-examined through a focus on the routines of daily life.

The Material Elements of Everyday Life: Finds and Spaces

Our starting point must be the distributions of material culture in space, and the constructed nature of that space in the communities which were the focus of soldiers' lives. As already noted, forts are by no means only occupied by soldiers, in the 4th c. or indeed earlier, and they are also not the only spaces through which soldiers moved.[20] Nonetheless, they provide an essential foundation for exploring military life. While the bases of the early imperial military are certainly in urgent need of re-assessment in the light of new evidence and new theoretical concerns, I will be arguing that the relatively homogenous range of practices in forts across Britain diversified in the later Roman period, albeit in quite similar ways.[21] By this I mean that the specific patterns of daily life in forts in different regions became more and more distinctive, but that this is evident in relation to similar specific practices—primarily those to do with routines of creating and inhabiting particular spaces. At the same time, in other practices, such as those concerned with personal appearance or eating, there are signs of consistently maintained traditions, or at least longer-term cycles of change. This balance between transformation of some routines and continuity in others is characteristic of the complexity of 'daily life', and as we will see goes some way towards accounting for the broader social changes that are typically understood to constitute the 'end' of Roman culture in the West, particularly in Britain.

South Shields, just beyond the eastern end of Hadrian's Wall, provides a useful focus for some of these issues (figs. 1–2). The overall sequence at this site is an example in itself of the dynamism of the military over the whole of the Roman period, with several phases of rearrangement reflecting the changing need for a supply base at this

[19] See e.g., Bidwell (1997) 99–118.

[20] See e.g., Allason-Jones (2001) on material culture and the identities of fort inhabitants.

[21] Cf. Reece (1997) 8–10.

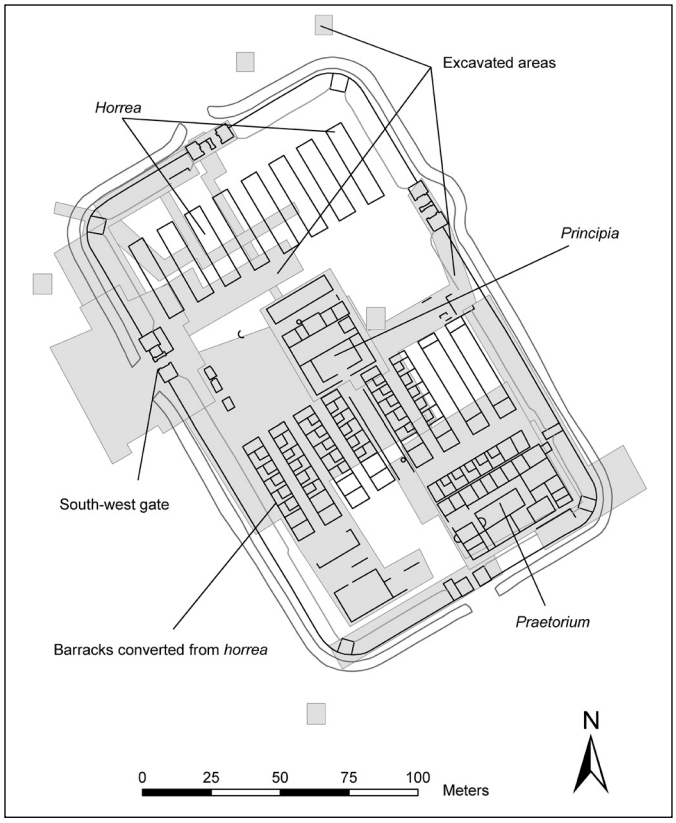

Fig. 1 General plan of South Shields in the 4th c. A.D., showing buildings mentioned in the text and excavated areas (with areas too small or diffuse to plot shown as small squares) (background plan after Bidwell and Speak (1994) 34).

extremity of Britain's major northern frontier installation. South Shields also has good evidence for both continuity and change in the Late Roman period.[22] At the beginning of the 4th c., when it is likely that a new unit from the East (*numerus barcariorum Tigrisiensium*) replaced the existing garrison (*cohors V Gallorum*), the fort was remodelled to provide more accommodation, with some of the storebuildings being converted to barracks, and a new *principia* and commander's house. Some of the adjustments made over time to these and other structures will concern

[22] Bidwell and Speak (1994) 11–47.

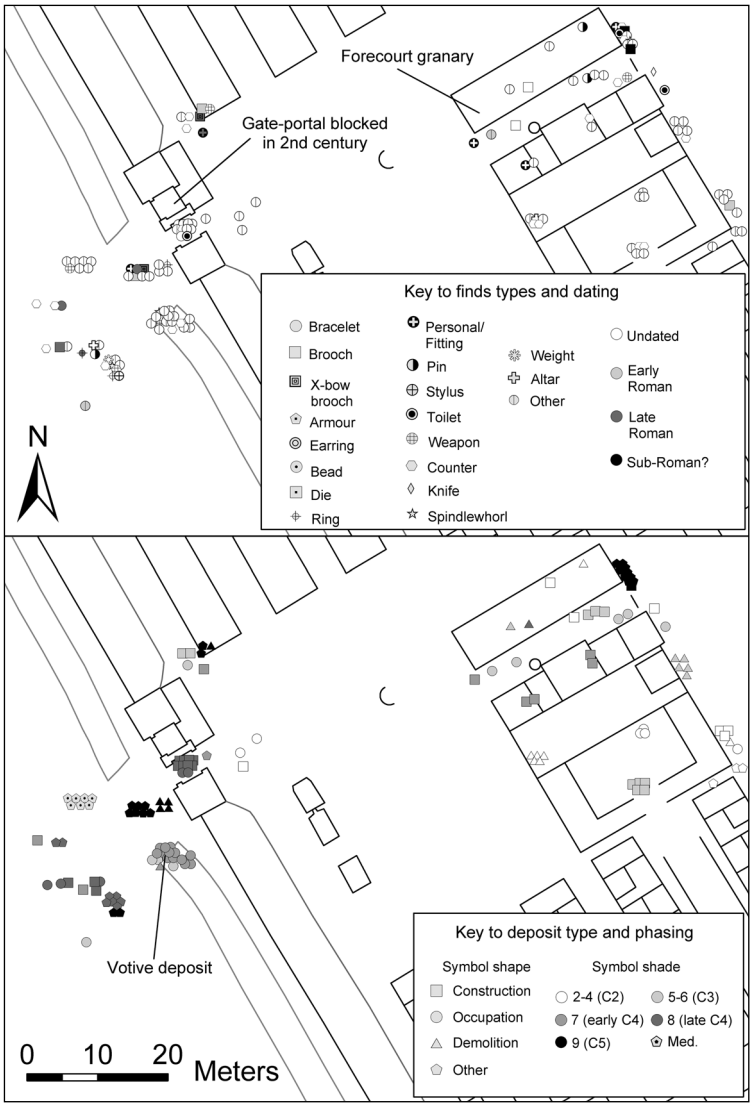

Fig. 2 Distributions of stratified small finds at South Shields, according to finds-type and date, and context-type and phasing (background plan after Bidwell and Speak (1994) 34; data from Croom *et al.* (1994)).

us in the next section. For now, our priority is the way that artefactual patterns can tell us something about the practices taking place in the fort in a more synchronic fashion. Here, the detailed recent excavations of the *principia* and south-west gate are useful.[23] These areas are shown in fig. 2, with small finds plotted in the approximate area of their location of recovery, and with an indication of the nature of the context that they were found in.

The patterns evident in fig. 2 relate, in the first instance, to depositional activity. It is notable in this regard that, although stratified finds from all phases are depicted, many of them appear in later Roman contexts, and the majority of Early Roman contexts which do appear are in the region of the *principia*. This phenomenon is presumably partly attributable to material from earlier deposits being disturbed later in the life of the fort and then redeposited, but may also, perhaps, relate to changing rubbish disposal practices—the location of most rubbish-dumping shifting from other parts of the fort (or, more likely, its exterior) to the gateway and ditches in the 4th c. These points in turn indicate how daily life in a Late Roman fort like this one involved a near-constant engagement with the past, in the form of old things being turned up when new features were created, and at the same time entailed change in the form of shifting practices in the use of space. This balance is confirmed when we look at the finds from the site and their typological dating. A considerable number of finds are undateable, and largely unidentifiable, fittings. Most of the objects which are more specifiable in terms of their function—and which attest to a range of different practices in their own right, including gaming, weighing, spinning, and creating a certain personal appearance—were found in contexts associated with refuse disposal near the south-west gate, especially in ditch terminals (not all of the complex sequence of ditches is shown on the plan). Of those objects that could be dated, some were quite old. This again raises the issue of aspects of daily practice which were rooted in tradition (for example, through the wearing of an antique brooch) but also the changing meanings of spaces. The *principia* seems to have been kept clean while deposits were building up in and around the ditches (as one might expect from its function), although at a late stage a finds-rich deposit did accumulate just behind the *principia* by the

[23] Bidwell and Speak (1994).

old 'forecourt granary'. Meanwhile, at least one of the ditch-terminal deposits was not just 'refuse', but a votive deposit containing a number of statue and ceramic fragments depicting parts of heads.

The combination of the details of the finds themselves, their dating, and their contexts of discovery is thus suggestive of the wide range of practices regularly enacted in this part of the Late Roman fort at South Shields, their mixing in depositional activities which had some structure themselves (and which, in the case of the cleaning of the *principia*, may have been just as much 'ritual' as the votive ditch deposit), and the ways in which people encountered or maintained some past traditions at the same time as changing others. This kind of detailed picture of daily life can be traced at other sites too, even if the artefactual evidence at these is not so well understood as that at South Shields. The excavation of 4th c. barracks at Housesteads in the 1960s and 1970s played a significant part in reinforcing interpretations of decline in the Late Roman military.[24] The sequence found at Building XIV (fig. 3) revealed that in the early 4th c. (the 'Constantinian restoration' in the traditional—but increasingly implausible—framework of 'Wall Periods') the 'normal' contiguous *contubernia* were replaced by detached structures, dubbed 'chalets'. These represented somewhat different spatial arrangements in the barracks (with the eavesdrip gaps between units presumably indicating separate roofing), alterations to the dimensions (the units ran across the previous veranda area), and some apparent internal changes (flagged floors instead of earlier clay; internal stone 'benches'; variations in wall construction). A subsequent, 'Theodosian' phase of the later 4th c. involved further modification, partition and reflooring.[25] A similar sequence was later examined in the adjoining Building XIII, with even more signs of variation between different units (some having one party wall at the back, some having multiple entrances, some with different floorings).[26] Unfortunately, these excavations, particularly the later series, have not been fully published, so finds information is lacking.

This has not inhibited speculation on the meaning of these structures, however. From the outset, they were taken as evidence which supported scholars' pre-understandings about the Late Roman military, particularly

[24] See Daniels (1980); cf. Swift (2000) 51–52.
[25] Wilkes (1960); Wilkes (1961).
[26] Wilson (1975) 232; Goodburn (1976) 309.

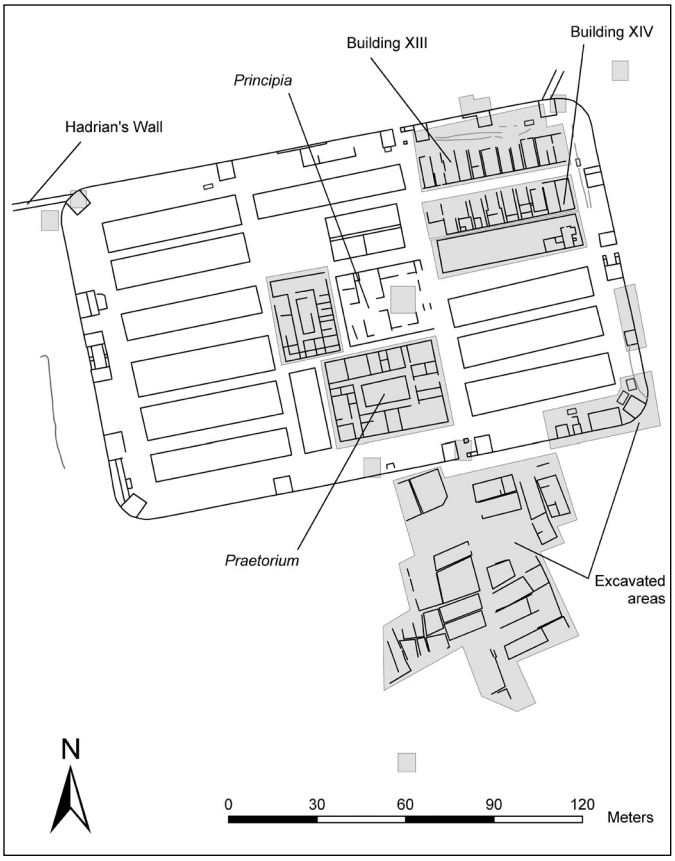

Fig. 3 General plan of Housesteads, showing buildings mentioned in the text and excavated areas (with areas too small or diffuse to plot shown as small squares) (background plan after Birley and Keeney (1935) pl. XXII; Crow (1995) 29).

the idea that there was more mixing with civilians in this period. The less rigid organisation of the buildings was associated by J. Wilkes with the transformation of military forts into "fortified villages", while C. Daniels asserted, from his understanding of the finds evidence, that the quantities of personal objects implied that these buildings were "married quarters".[27] Subsequently, both of these lines of argument have been criticised. P. Bidwell has argued that the 'chalet' type of barrack was

[27] Wilkes (1961) 289; Daniels (1980) 189; cf. Bosanquet (1904) 235; Hassall (1999).

a 3rd c. development adapted to a smaller size of century, paralleled in a number of other locations,[28] while L. Allason-Jones has pointed out that there were as many 'personal objects' in the earlier levels of the barracks, when things were supposedly more organised, as in the later phase of 'decline'.[29] These objections are clearly important, and valid, exposing some of the major biases in earlier understandings of the later Roman military which are partly founded also on dubious assumptions about the gendering of artefacts and 'proper' military practice.[30] Nonetheless, J. Crow has rightly noted that the variation between individual units at Housesteads, and between these 'chalets' and those found in other forts, is still some kind of transformation of earlier practice.[31] Whatever it means in terms of the inhabitants' gender balance—and here the argument can go either way—it does indicate an increasing trend towards locally-diverse kinds of 'military' space in the 4th c., particularly towards the end of the century.

This much is confirmed if we look at one more British site: Portchester Castle. Portchester is one of the Saxon Shore forts on the south coast of the British mainland, constructed in the later 3rd c. as part of a still-controversial programme of defence.[32] In the 1960s and early 1970s, a substantial portion of the fort (half of one whole quadrant) was excavated under the direction of B. Cunliffe.[33] The fort at Portchester is more typically 'Late Roman', in terms of its defensive architecture, than the examples discussed so far, but its internal plan is different not only to these but also to late examples from other parts of the empire, such as Dionysias in Egypt,[34] at least as far as the plan is discernible at all. A major difference from these other places is the lack of internal construction in stone, the buildings identified being located by drip-gullies or sill-beam slots. These were individual units, as in the 'chalet' tradition, but they dated to different phases and were not clearly arranged in rows. They were surrounded by a landscape of pits, used as depositories for domestic refuse and cess (fig. 4). Rubbish dumps were also created against the back face of the walls, and there

[28] Bidwell (1997) 62–67.
[29] Allason-Jones (1995) 30.
[30] Cf. van Driel-Murray (1995).
[31] Crow (1995) 85–92; Crow (1999) 125–27; Crow (2004) 100–12; cf. Hodgson and Bidwell (2004) 147–54.
[32] See now Pearson (2002).
[33] Cunliffe (1975).
[34] Cf. Bidwell (1996).

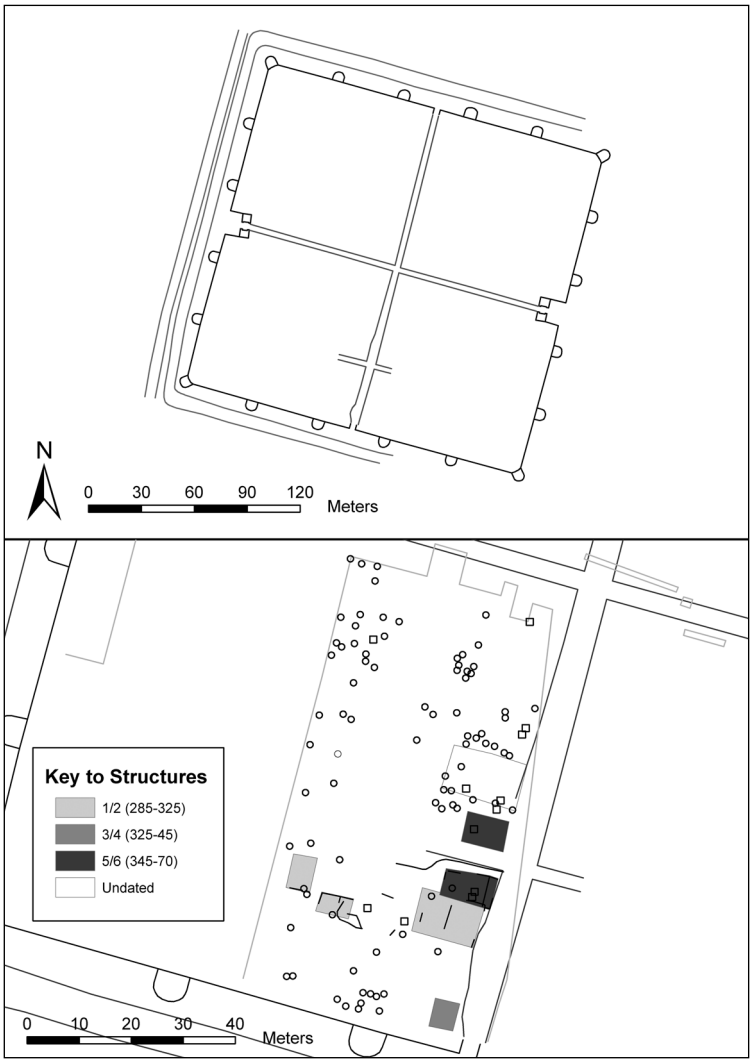

Fig. 4 General plan of Portchester (above), with a detailed view of the pits/wells (circular symbols), hearths (square symbols), and structures (with an indication of their phasing and date) excavated by Barry Cunliffe (below) (background plan after Cunliffe (1975) 14).

were some scattered ovens/hearths in the area excavated (not all clearly associated with particular buildings).

Cunliffe associated the more profuse phases of rubbish-dumping with primarily civilian occupation, punctuated by episodes when soldiers came in to 'tidy up' by sealing some of the larger dumps with clay. However, the assumption that military occupation is necessarily tidy—just like the assumption that it is necessarily all-male, in this or earlier periods—is questionable; we have already seen some indications of this from South Shields. Soldiers certainly generate and dispose of rubbish in a range of places. The preference for pit-digging is something that we have not encountered so much at either South Shields or Housesteads, and may relate to lower density of occupation within the walls,[35] or perhaps to the fact that this was a relatively new site, so the inhabitants did not have to dig through earlier surfaces and buildings in the same way as would have been the case in a site like Housesteads (where pits do occur in earlier levels).[36] Whatever the significance of this (see below), the refuse-disposal contexts of many of the finds from Portchester shed important light on the distinctive shape of daily life in the spaces of the fort, in conjunction with the structures. This was a place where daily life was similar to that of the forts at Housesteads and South Shields—people were wearing broadly similar kinds of objects, and eating similar kinds of foods from similar kinds of vessels (albeit made in local ways). Yet it had its own atmosphere and sense of place. This was structured by the perhaps more frequent routines of building maintenance and replacement (given the lack of stone-founded structures), pit-digging, and the use of outside hearths, as well as many more transient pathways between buildings and features than can be detected at either of the northern forts considered. We will look in more detail at the chronology of some of these routines in the next section.

Finally, in this section, it is worth looking at a different kind of context altogether for the objects which have so far been incorporated into stories of building, dwelling and disposal. Burial contexts associated with later Roman forts in Britain are, unfortunately, virtually unknown, with most 4th c. cemeteries which have been excavated being either rural or urban. Although some of these have produced individual inhumations which have been associated with military institutions, there are many problems in distinguishing soldiers from other officials in imperial

[35] *Contra* Cunliffe (1975) 427–28.
[36] E.g., Leach and Wilkes (1962).

service. The location of such burials outside a fort would provide some support for their association with specifically 'military' identities.[37] One site where this occurs—although, ironically, without the interior of the fort being much explored—is Oudenburg in Belgium.[38] Excavated from the 1950s to the 1970s, the later 4th c. cemetery contained 216 inhumations. Of the burials, 133 were furnished and of these only 21 were believed to be female—sexing being done purely on the basis of the grave goods. While weapons were absent from the 'male' burials, several (32) had crossbow brooches, and so the excavators interpreted this as a cemetery of regular Roman military personnel. The conformity which the excavators emphasised,[39] however, is belied by evidence for considerable diversity in burial practice and—if this context can be taken to relate to daily practices of using the kinds of artefacts placed in the grave—everyday life. A significantly greater number of burials were unfurnished (83) than were wearing the full supposed 'uniform' of crossbow brooch, belt, and knife (9), while 44 furnished burials contained only pottery or glass vessels. Crossbow brooches also occasionally co-occurred with items like combs and shears, which have rather less military associations. There was also some variation in the orientation of the burials. None of this is to deny that this was a cemetery containing some official, indeed, military, individuals, but rather to state that the everyday lifeworld of these people, insofar as it was fixed in the burial rite, was quite a diverse one in terms of the precise practices that were followed, and the identities that these helped to shape. We can get closer to the nature of these identities by considering some of the examples discussed so far from a more explicitly temporalised perspective.

The Temporal Elements of Everyday Life: Traditions and Change

As the brief discussion of the concept of everyday life in the introduction indicated, a diachronic perspective is essential to understanding both what 'the everyday' is, and how it is important to broader-scale processes of social change. What makes daily practice interesting is

[37] Cf. Swift (2000) 42–45. The recently-published cemetery of the fort at Brougham does provide important evidence for the construction of identity, but is confined to the 3rd c. A.D.; see Cool (2004).

[38] Mertens (1964), (1972) and (1977); Mertens and van Impe (1971).

[39] Mertens and van Impe (1971) 230.

not simply what it reveals about a different lifeworld to our own, but how it underpins the medium-term cycles of institutional transformation and the longer term forces of history.[40] Similarly, the individual contexts of particular artefacts can be connected to the wider contexts of late antique society by understanding their involvement in specific traditional or novel patterns of practice. We can begin to chart some of these connections by returning to the forts on the northern frontier of Britain. South Shields has some important evidence for both continuity and change through the 4th c., and into the 5th. In the areas already discussed, the depositional contexts of the various small finds are indicative of persistent maintenance practices in the gateway, for example (fig. 2). The patching of the roadway through the gate portal and the cutting and filling of ditches had been normal occurrences for decades in this location. The gate portal was maintained into the 5th c., even after stone was apparently not available or desirable for the purpose, timber being used instead.[41] While these very typical activities were taking place in a main point of access to the fort, there were some changes within. In the south-eastern corner of the fort (fig. 1), one of the major additions of the early 4th c. rebuild was a large courtyard house, built for a commander whose architectural sensibilities were distinctly Mediterranean, according to the excavators.[42] However, this building was constantly changing as it was used during the 4th c. There were various minor alterations at first, including the enlargement of the courtyard and the addition of further heating facilities, but later the transformations were more dramatic, involving some rooms being given over to rubbish disposal, and part of the baths becoming a workshop.[43] Paths through the building were still maintained (using *spolia* from elsewhere in the fort), but the people using them seem to have shifted in their daily practices of dwelling from a 'Mediterranean' lifestyle to something more local.

Similar patterns of balanced continuity and transformation in daily practices can be detected with slightly lower contextual resolution at Housesteads. During the period that the barrack sequences discussed above were unfolding, the central buildings of the fort were also undergoing changes. Although excavated right at the end of the 19th c.,

[40] Cf. Giddens (1984) 34–37; Lucas (2005) 15–19.
[41] Bidwell and Speak (1994) 46.
[42] Hodgson (1996).
[43] Hodgson (1994a) and (1994b).

the sequence in the *principia* at Housesteads was adequately recorded, and reveals a similar pattern of adaptation to that just outlined for the *praetorium* at South Shields.[44] The dating is, as might be expected, imprecise, but during the 4th c. the portico around the *principia* forecourt was enclosed and sub-divided, metalworking took place in the hall, and one of the rear rooms was used as an armoury, while rubbish disposal occurred in others. The *praetorium* at Housesteads was similarly altered, with internal spaces sub-divided and the in-filling of a hypocaust in the later 4th c.; the excavator in this case believed that the original 'Mediterranean' courtyard house was being converted for use by 'Germanic' officers (there is epigraphic and some ceramic evidence for Frisian reinforcements at the fort in the 3rd c.).[45] However, given that these troops were probably located outside the fort, that the Frisian pottery petered out by the early 4th c., and that local adaptation in other parts of the fort continued (for example with earth and timber defensive reinforcements) right until the beginning of the 5th c.,[46] this may rather be a further sign of the slow transformation of military traditions in this part of the frontier. Finds of crossbow brooches from various parts of the fort, including the barracks of Building XIV, indicate (insofar as these can be taken to confirm an official connection; cf. the discussion of Oudenburg, above) that the soldiers at Housesteads were far from cut off from the contemporary military community, but they also maintained—with gradually accumulating, small-scale changes—the local patterns of life in their home.

At least one of the other sites discussed in the previous section from the Channel military zone also offers a distinctive temporal perspective on continuity and change in this period. Mention has already been made of the episodic nature of occupation that Cunliffe proposed for the sequence at Portchester, and we can look at this in a little more detail here. The first phase in the main excavated area was the construction of the fort around A.D. 285/90. From this point to *ca.* A.D. 325, rubbish dumps accumulated against the walls, and some cess-pits were also dug. A clay layer sealed this in *ca.* A.D. 325, after which the dumps built up again and more of the pits were dug, from which came most of the pottery from the site overall. Another sealing deposit was laid down in

[44] Bosanquet (1904).
[45] Charlesworth (1975); Crow (1995) 59–62, 72–73; Crow (2004) 65–67, 79–81; Jobey (1979).
[46] Crow (1988).

ca. A.D. 345, and then the third and final phase of rubbish dumping commenced, lasting until at least the 370s. There were also sub-phases of more or less 'order' identified within these periods on the basis of coin evidence.[47] While I have noted above the problems of assuming that new influxes of soldiers to this community might be associated with the 'tidying up' represented by the clay sealing layers, the diversity of rubbish disposal activities, and their cyclicity in terms of periods of greater and lesser deposition, are important. They indicate that, in a community containing both soldiers and non-soldiers (like probably every other fort in Britain at this time, and no less of a 'military' community for that),[48] the routines of daily life were somewhat flexible. The basic parameters of practice were consistent: a particular part of the fort given over to refuse dumping (probably one of several); and particular habits of digging pits around standing structures to dispose of other waste, perhaps somehow discriminated from that put on the communal dump. Yet, at 20 year intervals, a decision was taken to cover over the main rubbish heap, though this was only a temporary measure, and it was one of a series of other changes in between these phases, to individual structures and to roadways, which were variously renewed or covered over with rubbish. The pottery, coins and other artefacts from these contexts indicate the range of activities that was going on in the fort—the different ways of eating, exchanging and working that were being practised—but it is in the contexts themselves that the shifting routines of the fort are most directly attested.

Unfortunately the evidence available from Oudenburg does not allow for much chronological resolution in separating the different graves, which might enable us to chart shifting burial practices, or shifting constructions of identity through specific items of material culture as worn.[49] This underlines a key point, though, about the discussion in this section. I have been emphasising the contexts of artefacts over the artefacts themselves, and focusing on what different practices of construction, occupation and disposal—all of which lead to the deposition of artefacts—indicate about the social environment in which those artefacts were used. Practices associated with rubbish disposal have dominated this account, and while not surprising this point requires some labour-

[47] Cunliffe (1975) 419–31; Reece (1991).
[48] James (1999) 23.
[49] Only 16 graves had individual coin-finds, 3 others contained hoards; Mertens (1977) 62.

ing, as it means that how things were used in daily life is not as readily interpretable as how spaces were used. In a sense, this is an inversion of common sense understanding, as typically artefacts have at least some intrinsic functional quality. This is, though, only likely to comprise a portion of their meaningful content. We can ascribe them to particular broad practices—such as exchanging for coins, for example—but it is difficult to construct full biographies for individual pieces, even when they occur in burials.[50] Indeed, the contextual dimension provides our only hope in proceeding with this, providing either firmer associations which enable functional significance to be pinned down, or at the least indications of how people interacted with the aspects of their material world that we don't always call 'artefacts': the stone, wood and dirt, which together make up buildings and surfaces and define the spaces between them.[51] Through these we can arrive at biographies of places, within which things certainly play a crucial role, but primarily in terms of their contextual relationships. From such biographies, we can proceed to our ultimate goal, biographies of people.

The Social Elements of Everyday Life: Interactions and Identities

Having examined the materiality of everyday life in later Roman forts within spatial and temporal frames, we must now draw out more of the cultural importance of the patterns revealed. At various points in the preceding discussion, reference has been made to the significance of particular attributes of artefacts, buildings or deposits in terms of identities—'military'/'civilian', 'male'/'female', and so on. Of course, these are really identities that people create in social interactions in conjunction with things, not qualities of things in themselves. We need, therefore, to consider how the elements of tradition and transformation in material practices that we have seen were the basis for particular kinds of identities, and inevitably these identities will turn out to be more complex than the simple dichotomies just referred to. 'Military' identity is a case in point, and perhaps the most important one to discuss in the context of the remit of this paper. There are many

[50] Cf. Spector (1991).
[51] Cf. Allison *et al.* (2004).

sources of evidence that one might bring to bear upon the problem of the nature of Roman military identity in the 4th and 5th c.,[52] but I will confine myself here to the small number of examples that I have used so far. While, as noted above, the Late Roman military has often been characterised as an institution in decay, it has also been depicted as a vital part of an increasingly centralised, bureaucratic and exploitative system of government.[53] The underlying reasons for this tension between divergent modern (and to some extent ancient) views can be illustrated by the examples at hand, and connected to the persistent balance between consistency and change in everyday life, which would always have offered potential for different constructions of identity and different interpretations of political reality.

The particular biographies of place that have been sketched in the preceding sections certainly offer some grounds for seeing consistent patterns of practice across a widespread military community.[54] Some of these were traditional to that community, while others were innovations which spread to at least some parts of it. The prominent boundary around the fort, and the layout of buildings within it (at least for those sites founded in the 2nd c. A.D., such as South Shields and Housesteads), were key elements in the creation of a regularised and disciplined environment which would shape daily life in specific ways—ways which would be new to the recruit, but familiar to a soldier from, more or less, any part of the empire. Some parts of this environment were emphasised in the newer fort at Portchester—particularly the boundary—while others appear to have been altered, at least as far as we can tell. In terms of the portable material culture found in these locations, weapons, belt-fittings and items like crossbow brooches all might be seen as badges of military identity in certain contexts—their distribution is certainly consistent with the militarised Late Roman frontier zones.[55] Again, some of these status-symbols were traditional—particularly the belt—while others were more recent innovations. There is some evidence, also, from animal bone assemblages at several sites that pork continued to be more popular on fort sites in the 4th c. A.D. than on

[52] For a fuller exposition, see Gardner (forthcoming).
[53] E.g., Faulkner (2000).
[54] Cf. James (1999) on the military community and its reproduction through material culture, and more broadly the papers in Goldsworthy and Haynes (1999).
[55] Swift (2000) 45–52.

other kinds of site—a pattern established in the earlier Roman period.[56] This indicates the persistence of a specific dietary tradition which might have provided a particular focus for familiarity between soldiers from different forts in Britain.

Against these signs of consistent identity, however, must be set a number of indications of increasing local variation in the Late Roman period, particularly in the 2nd half of the 4th c. The sequences of specific adaptations to barracks, *praetoria*, *principia*, and defences have been outlined for South Shields and Housesteads, and to these might be added the important sequence of modifications to the *horrea* at Birdoswald,[57] among other examples. The differential adoption of new military practices is also a factor here. Thus, the new-style defences at Portchester, or the latest *praetorium* fashion at South Shields, were not universally adopted; the soldiers at Housesteads preferred to keep doing things in their own way. Even then, at South Shields the novelty soon wore off, and the fort environment was adapted to changing routines of use. The evidence for these variations between each site (or between small groups of sites, such as those adopting particular forms of barracks) is not just structural, but comes from the combination of buildings and artefacts in contextual relationships, and particularly from the shifting priorities in the use of space reflected in rubbish disposal. The artefacts themselves, though, also indicate something of the same story of decentralisation. Pottery supplies, for example, came from a number of successful regional sources in the later 4th c., and a site like South Shields received less of its pottery from the south of Britain (dominant in 2nd and 3rd c. supply) and more from the north of Britain. Although the types of pottery in use were sufficiently similar between regions that they do not fracture the associated identities based on cooking and eating practices too much,[58] the shift from more widespread distributions across most of Britain, particularly of Black Burnished fabrics, would have been *potentially* noticeable to people going about their daily lives in these various locations. They might thus have been drawn into increasingly local definitions of military communities.

The 'potential' for such small differences to be noticed is vital to emphasise. The basic material similarities and differences between fort

[56] Gardner (in press); cf. King (1999).
[57] Wilmott (1995) and (1997).
[58] Tyers (1996) 77–78.

sites only became meaningful in the past insofar as they were involved in human interactions. This is why pinning down the symbolic significance of objects like crossbow brooches in terms of a simple, fixed identity will always be problematic. While generally associated with a military or official status, these items perhaps also signified rank within a unit, so would be susceptible to a different reading depending upon whether the wearer was interacting with another soldier in the same unit, a non-soldier living in or around the fort, a visiting official in the imperial administration, or a farmer encountered a day's ride away. Similarly, the particular structural sequences in each fort were the very stuff of daily life to the inhabitants: small-scale developments which did not seem like great transformations at the time they were initiated. Perhaps the new-style barracks at Housesteads were a talking point for a while, but like the changes to rubbish-disposal practices at South Shields or Portchester, or to burial practices at Oudenburg, over the course of the 4th c. they were soon absorbed into the on-going flow of everyday life in places inhabited for many years. The peculiar local character of each place at any particular time in Late Antiquity might only have been obvious to a visitor from another fort. In understanding the relationships between artefacts—from brooches to buildings—and identities, these factors are paramount: the multiple meanings that objects can have, and the way that these change according to how people move about and encounter noticeable similarity and difference. What ties down meaning in the past, and interpretation in the present, is context, and I will conclude by linking the small stories of minor differences between communities in ways of doing things and some of the larger stories of Late Antiquity.

Conclusion: Relating Artefactual and Social Contexts

The grand narratives of the later Roman period, at least in reference to the West, have shifted from an emphasis on radical discontinuity to a much more gentle process of transformation.[59] The latter is closer to the picture of quotidian experience that has been charted in this paper, but to really begin to apprehend the significance of the everyday scale

[59] See e.g., Webster and Brown (1997); cf. Gutteridge (2004) 136–38.

of life we must also be able to talk about the breaks and confrontations between different traditions that mark redefinitions of different kinds of identity—in the case of this paper, what it meant to be a Roman soldier, to the point where that ceased to be a meaningful identity in the 5th c. And this did happen, at least in some places in Britain—Gildas, for example, is able to talk about the Romans as a separate people to his people, the Britons, while writing in Latin and participating in a religious belief and organisation which had spread to Britain through mechanisms associated with the empire.[60] Here is not the place to go into detail about the disputed events of the early 5th c., which left Britain—and indeed northern Gaul—detached from the direct administrative and economic control of the empire,[61] but those events were presumably significant in such a rupturing of identification. Nonetheless, they can be linked to the more gradual localisation of identities in later Roman Britain if we consider the unintended consequences of the actions of the people living in the kinds of places discussed in this paper.[62] For several years, if not decades, the drift of daily life had moved further towards local ways of living, and if anything the heightened sense of unity and order in the imperial propaganda of the period—whether in artistic representation or bureaucratic codification—is perhaps a tacit recognition that this was becoming a widespread pattern across the empire.[63] The conditions were thus ripe for the more radical disjuncture of the early 5th c.

In this way, the smallest archaeological contexts—be they rubbish deposits, individual burials or alterations to buildings—in particular places become connected to the widest social contexts of the Roman empire. The benefit of a view through the 'prism of the local', and of the everyday, is that the big questions of Late Antiquity—what changed, when, and what did it mean?—can all be addressed through the lives of real people rather than abstract social systems. The latter appear, to be sure, but only in their manifestations in routine or novel practices and interactions, which can be mapped more and more successfully in detailed archaeological data. This is important, I think, because it

[60] Esmonde Cleary (1989) 173–74.
[61] See e.g., Esmonde Cleary (1989) for a full account.
[62] Cf. Giddens (1984) 9–14.
[63] The imperial art of the Dominate (see e.g., Strong (1988) 264–327) is matched in its imposition of formal regularity by the law-codes of the Theodosian Code; Pharr (1952).

forces us to consider what the appropriate scales are for describing or understanding different social processes. A shift in cultural traditions or identifications might take several years, occurring through increments which were barely noticeable to the people participating in them on a day-to-day basis; an important political decision might take place in one day, be a talking point for weeks thereafter, but be gradually blurred by the passage of months and years. Above all, attention to the temporal scale of events and processes must be linked to a spatial scale which gives us a sense of how what it meant to be 'Roman', or any other kind of identity, varied from place to place, and from community to community. If thus getting closer to the lived experience of past people in their own present will always be a challenging task, it is surely at least as worthwhile a way of attempting to understand Late Antiquity as the established grand narratives.

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INTERPRETING FINDS IN CONTEXT: NICOPOLIS AND DICHIN REVISITED

Andrew Poulter

Abstract

It is no easy task to reconstruct human activity from layers or objects excavated on archaeological sites. The reconstruction of a stratigraphic sequence (integrating finds in the process) can change the interpretation of a deposit. Particular attention should be paid to the interplay between sites and finds. Too often the latter become the property of the specialist and acquire their importance as objects in themselves, not as essential tools for reconstructing a site's history, a problem exacerbated by the usual relegation of finds to an attached report, divorced from any meaningful description of the archaeological context. However, the value of involving finds in the interpretation of archaeological sequences is illustrated by examples from two sites excavated by the author, Nicopolis and Dichin, both in Bulgaria.

Introduction: Recording Strategies

Finds acquire particular importance when they come from a carefully excavated and well-recorded sequence of deposits, where not only the objects themselves, but their associations with other finds (including biological and ceramic remains) can be established and quantified. For some 25 years, site-recording on British excavations has been based upon the context system, the object being to reconstruct a 'stratigraphic matrix,' which records three-dimensional relationships between all identified features, from the lower fill of a post-hole to a standing stone wall.[1] The matrix establishes the position of each deposit in the sequence, relative to all other contexts excavated. Thereafter, the application of dating evidence (ceramics, or well-dated finds, such as coins) provides a chronological framework which allows the site sequence to be divided

[1] Harris (1989).

L. Lavan, E. Swift, and T. Putzeys (edd.) *Objects in Context, Objects in Use* (Late Antique Archaeology 5 – 2007) (Leiden 2007), pp. 685–705

into periods or phases of occupation.[2] Yet, this alone is not a sufficiently solid basis for reconstructing the history of the site.

A second stage is post-excavation analysis. This should not involve only the passive study of finds for their own sake, but a re-evaluation of the interpretation of contexts and an attempt to identify the processes that account for their formation. Some conclusions are derived directly from relationships established in the site matrix, but others come from the study of small finds, especially the study of their distribution across excavated areas and in their vertical distribution through successive deposits. A study of an established stratigraphic sequence with quantified ceramic evidence can lead to apparently subtle, but in fact significant, reinterpretations. Unfortunately, post-excavation analysis of deposits and their reinterpretation is not as common as it should be. The method often involves reconstructing the archaeological sequence and then fitting the finds into the interpretation of the archaeological evidence established on site. The reader of the final report is rarely able to effectively link the small finds with the archaeological strata in which they were found;[3] and valuable information, which could allow the published site-based conclusions to be reassessed or changed, is lost.

The final stage is to establish the sequence of human activity from the stratigraphic sequence. Getting this far may appear impressive, allowing the archaeologist plenty of scope for copious descriptions of change and the development of structures, but it still leaves significant gaps in our understanding. The nature of deposition may preclude any reliable interpretation of a building's function, even though its physical changes and rebuilds can be established and described in detail. The cleanliness of the Romans, their often solid stone floors, and the consequent absence of indicative finds (often mixed with rubbish accumulating after the building was abandoned) frequently frustrates attempts to establish the original function. Sometimes, however, rich deposits, created during a sudden destruction of a building can provide better evidence for the use of the structure. But, helpful though they are, even destruction deposits still present difficulties: explanations can range from the firing

[2] The dating first established on the basis of small finds and ceramics remains provisional until the post-excavation process is completed. Redeposition, in particular, can prove misleading and the character of ceramic assemblages needs to be established for all areas of a site and then quantified before this problem can be addressed.

[3] See Allison (1997). A partial solution is to record, for each find, a description of the context (based on the matrix and post-excavation analysis, not upon on-site descriptions); cf. the recording of small finds in Poulter (forthcoming).

of a building, during an attack, to a localised accidental conflagration of no general significance for the region.[4] The aim of this paper is to stress the importance of careful reflection on the nature and formation of such deposits, and their associated finds, before proceeding cautiously towards interpretation, balancing the scales of evidence and exploring the merits of each of a range of possible explanations. The British excavations on the site of the ancient city of Nicopolis and the Early Byzantine fortress at Dichin, in northern Bulgaria, provide a number of relevant examples, starting with straightforward examples, and then moving on to more complex case studies.[5]

Understanding Site History: A Roman House and its Occupation Deposits

The first example is that of an extramural Roman house excavated immediately outside the walls of Nicopolis.[6] The structure is remarkably well-preserved, because it had been demolished, the upper walls of mudbrick having been systematically levelled within the still upstanding remains of the structure. This ensured that the north-western part of the building (and no doubt the remaining unexcavated parts of the complex) still stood to a height of *ca.* 1.5 m (fig. 1). That the house was built towards the end of the 2nd c. or early in the 3rd c., seems relatively secure: it was built over an earlier building which had hypocaust heating, backfilled with make-up material, including 2nd c. pottery and finds. The life of the second house was quite short: the floors of all rooms and the peristyle, were covered by the *in situ* remains of a collapsed tile roof, burnt beams, and copious quantities of nails, used to secure the roof timbers. Following the fire, the upper walls were

[4] A good example of how interpreting destruction deposits relies heavily upon current attitudes amongst archaeologists as much as it does on the archaeological evidence is described by Hodgson (2005).

[5] The British excavations at Nicopolis, on the site of the Early Byzantine city, formed part of a joint Anglo-Bulgarian programme from 1985–1991, set up to explore the character of the Roman and Late Roman city. The Dichin excavations of an Early Byzantine fortress were part of second Bulgarian/British programme designed to investigate the character of the countryside in Late Antiquity. The work commenced in 1996 and fieldwork terminated in 2001. The first programme has been fully published and the reports on the second are in preparation. For the excavations at Dichin, see Poulter (1999b); Poulter (1999c).

[6] Poulter (1995) 187–201.

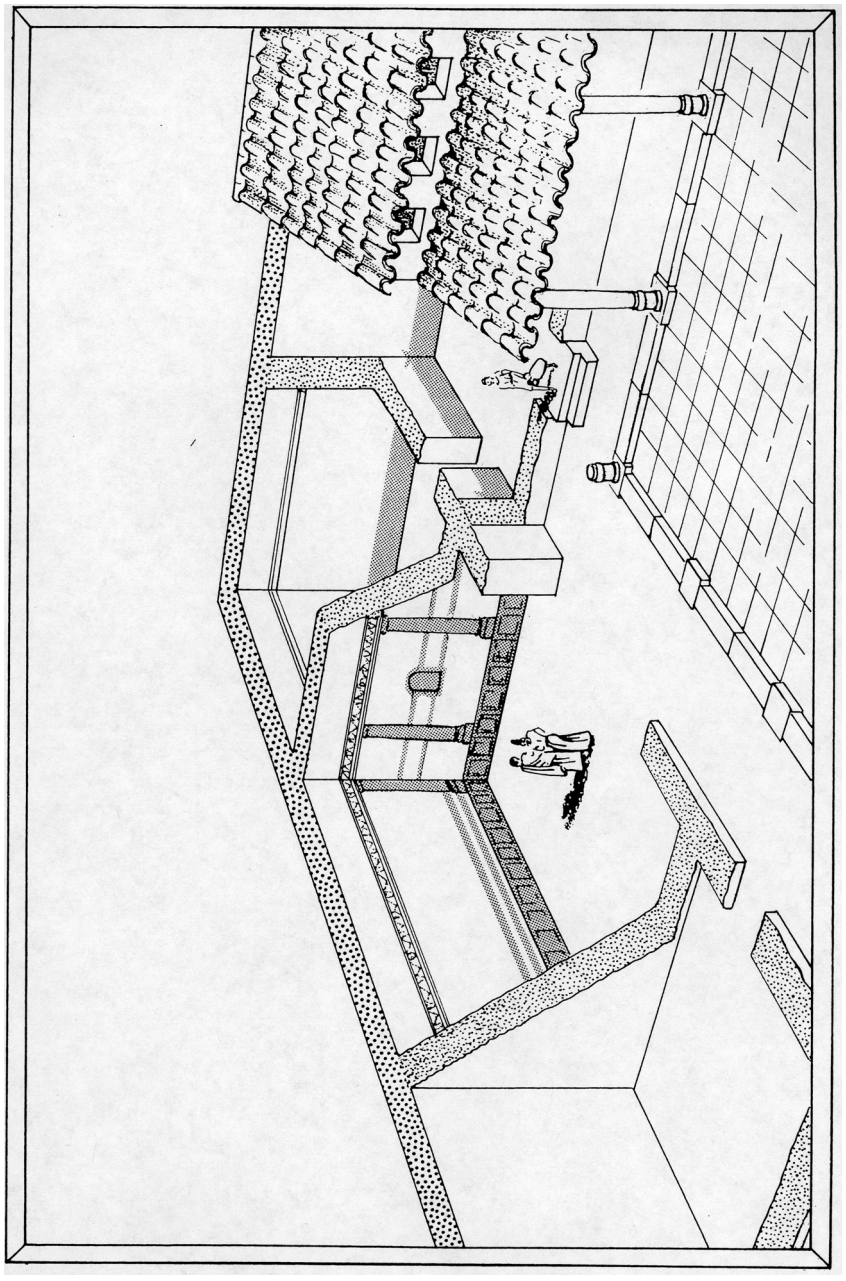

Fig. 1 The reconstruction of the Roman house, Nicopolis.

immediately demolished and the site levelled: there was no trace of silt between the destruction level and the overlying deep layer of mudbrick debris.[7] Dug into the demolition deposit were a series of domestic pits, indicating that the site was thereafter used for the disposal of domestic waste. The finds date this period of abandonment to the second half of the 3rd and 4th c. Consequently, the house must have been built *ca.* A.D. 200, and destroyed *ca.* A.D. 250.

In the south-eastern corner or the excavations, a paved court was found, a column base still *in situ* and its column lying where it had fallen: the peristyle must have still existed at the time the building was destroyed. To the north, a door led directly into a room, giving access to a small room at the corner of the building. Opening off the peristyle to the west was a notably larger room with a wide entrance which must have had a double-leafed door. The character of the house and the relative importance of the rooms was indicated by the quality of the internal decoration. Wall-plaster, which had either collapsed on the floor or adhered to the preserved walls, was found in each of the three rooms and on their outer walls, fronting on to the peristyle. In the case of the north-western and northern rooms, the decoration was modest, with a red dado and white plaster above, decorated with schematic half tendrils, whereas the large room opening off the peristyle to the west had much more sophisticated ornamentation, including a niche in the north wall, decorated with imitation marble panelling, as well as architectural scenes, including fluted columns and complex stucco mouldings.[8]

It is reasonable enough to rank the status of each of the rooms and to use this architectural information to tentatively assess their likely function when first built and decorated. The isolated and modestly decorated room in the north-west corner may have been a bedroom or perhaps accommodation for domestic servants. The large room with its remarkable stucco relief mouldings and complex wall-painting is likely to have been an important reception room (*andron*), and perhaps, given the large doorway opening onto the peristyle, it was used as a summer dining room. Only the function of the larger, partly excavated room to the north of the peristyle is less uncertain: perhaps a domestic

[7] Since the walls were made of mudbrick, if they had been left standing as ruins for more than a matter of weeks, rain would have started to erode them and a deep layer of dissolved mud would have accumulated across the destruction level. Had this happened, the evidence would have been detected during the excavations.

[8] Blagg in Poulter (1995) 243–57.

living room. At least its decorated plaster does not suggest that it served as a storeroom.

It follows that the excavation had uncovered a luxury residence of impressive size.[9] However, none of the rooms produced evidence for the furniture and possessions, which must surely have been in a house of this importance. Even so, the deep layer of broken and burnt tiles which covered the floors, along with burnt timbers, clearly demonstrates that the building was still roofed at the time of the destruction. Moreover, there was no sign that this destruction deposit had been disturbed during subsequent attempts to salvage possessions. In this case, it is not the presence but the absence of finds which is significant. For such a well-decorated house, all the floors would surely have been paved with limestone, if not marble. Instead, floors were simple clay surfaces, and the steps leading up to the northern room from the peristyle were made from crudely laid limestone blocks bonded with clay. All the internal fittings and even the original flooring would seem to have been removed before the complete—and apparently sudden—destruction and collapse of the roof. However, those finds which were recovered from the *domus* suggested that the house was not a high-status residence at the time of its final destruction.

On the clay floor of the *andron*, a limestone mortar stood upright in the centre of the room; a curious pile of water-worn pebbles had been left up against the north wall, perhaps intended for use as pestles in the mortar. In the northern room, a cup lay on the floor, also a quern stone, and, curiously, a complete ceramic hypocaust support, perhaps reused as a container. The destruction level also produced seeds of bitter vetch and barley, mixed with by-product waste. There were also dumps of slag on the floor. Consequently, it seems reasonable to conclude that the original owner vacated the premises sometime before the destruction. The standing building was still in use, but, in the last period before it was destroyed, it served an agricultural function and may have been used for metal-working. In this case, the finds from within the complex relate entirely to its secondary use and have no connection with the building's original function as an elegant extramural residence.

[9] That the upper walls were built of mudbrick should not be taken to imply that the house was in anyway inferior to other residences in the town. The lower walls, up to *ca.* 1.5 m in height, were well-built of mortared stone with carefully constructed foundations. The use of mudbrick in the upper walls was normal for Greek houses of the Classical and Hellenistic period: it provided warm insulation in winter and maintained a cooler temperature in summer than would be the case if the house had been built entirely of mortared stone.

Post-depositional History: A Church and its Destruction Layer

The extensive geophysical survey at Nicopolis, covering the full 6 ha within the Early Byzantine city, identified the location of a large rectangular structure, commanding the highest position in the centre of the site. As anticipated, this proved to be the site of an Early Byzantine church, 26.2 m long and 17.18 m wide (fig. 2). The floor of the nave and sections of the south aisle were preserved immediately below the modern turf line. However, very little of the superstructure survived: extensive robbing during the post-Medieval period removed the superstructure and a significant part of its deep foundations. Even so, the basilica's floor, its tiles arranged in a simple geometric pattern, largely survived and contained the burnt remains of the basilica's internal wooden fixtures: the settings for the altar rail, a timber *ambo*, and seating along the sides of the nave. Immediately above, a thick layer of ash with, occasionally, the clear outline of beams, indicated that the church must have been destroyed by fire when the site was finally abandoned in the last quarter of the 6th c.[10]

Because the floor was covered by this *in situ* destruction deposit, apparently unaffected by the activities of the stone robbers (whose attention focused on the demolition of the church walls and its solid foundations), it seemed worthwhile to examine the distribution of finds in detail, with the hope that this might provide useful information about the use and internal character of the church. Glass (except for well-preserved or clearly significant fragments) was 'bulk recorded'—meaning that the finds were recorded by context, like pottery, and not given individual find records.[11] The condition of the glass from the basilica suggested that the destruction debris was largely uncontaminated. Of the Early Byzantine lamps, the most complete examples came from the burnt deposit over the church floor.[12] Apart from the lamps, there was window and vessel glass. At the outset, the decision was taken to change policy in this area and to record all glass fragments as small finds and to provide exact co-ordinates for all 1,700 individual finds of glass in the hope that their distribution might provide evidence about lamp-lighting, the location of windows and ritual practices within the basilica.

[10] Poulter (1995) 44–45.
[11] Shepherd in Poulter (1999a) 299–378.
[12] Shepherd in Pouter (1999a) 173.

Fig. 2 A photographic plan of the Large Basilica at Nicopolis.

The results appeared not to match our expectations: the distribution of the glass suggested no obvious pattern: there were two major concentrations of glass of all types in the south-west corner of the southern aisle and outside the building, beyond the apse. Another surprise was that, although the burnt timbers indicated that the church's roof had been destroyed by fire, only a few tiny fragments of roof tile were recovered from the destruction deposit. The contrast with the 3rd c. Roman house described above, where collapsed roof tiles covered the floor, is striking. There were also very few metal objects, except for 6 iron double-spiked loops, probably used as hinges, perhaps for shutters protecting the church's glass windows.[13] What was missing were copper-alloy finds of any kind. Especially striking was the absence of metal lamp holders, which must have been used in the basilica along with the 'test tube' like lamps, many fragments of which came from the destruction deposit.

As so often in archaeology, there are at least two possible explanations. The most attractive, since it might also explain the concentration of glass finds, is that the building had been systematically stripped of valuable items before it burnt down. The stack of roof tiles found on the final floor surface in area P (a tower) also suggested that, before the final destruction, there had been attempts to dismantle the roof and recover the tiles. If, as seems likely, the interior fittings were also removed, then the two concentrations of glass might represent areas where the reusable metal was collected, such as chandeliers and broken up for reuse or easy transportation to another site.[14] If valuable items were salvaged before the site was abandoned, it may be that the basilica was set alight, not during an attack, but by the inhabitants themselves, immediately before abandoning the fortifications.

Other explanations are possible. The destruction level lay immediately below the modern turf line and, although it appeared to be uncontaminated, it could have been disturbed by people sorting through the destruction level, salvaging useful objects. The character of the deposit itself hints that this may have been the case. Although the outline of

[13] Only one was definitely stratified within the destruction level, the other 5 all came from contaminated areas above the floor or from post-Medieval robber spoils. Even so, since the site was never reoccupied until the post-Medieval period, it can be safely assumed that these distinctively Roman fittings were used in the basilica.

[14] Any item of copper-alloy—let alone precious metals—even if broken in the process of dismantling, would be a valuable resource which could be recycled (see below, the cobbled roadway and the reuse of copper-alloy objects).

several burnt timbers were visible in the main aisle, close to the northern stylobate, elsewhere there was no sign of individual timbers, just a black powdery ash. Perhaps the destruction layer had been carefully searched for reusable timbers which had survived the fire, as well as for other useful fittings from the church. This may have occurred immediately after the destruction of the basilica or much later, when the site was occupied by a post-Medieval settlement. Unfortunately, there is no means of determining which of these various possible explanations is correct.

Interpreting Rubbish: A Market or Metal Recycling?

Emerging from the south gate of the city of Nicopolis, a paved road surface was excavated for a distance of 32 m (figs. 3–4). Originally, it had been constructed with large, interlocking limestone slabs. However, during the 3rd c., when the south gate was blocked and access to the city from the south was no longer possible, the smaller side slabs were removed, at least in part to strengthen the city walls, leaving only the largest stones *in situ* over the central drain. During the 4th c., the defensive ditch immediately outside the gate was filled in, and the roadway crudely restored with a cobble spread, which was repaired by successive layers of river-worn cobbles.[15] Notable finds included articulated cattle bones, suggesting that the area may have been used for slaughtering animals, perhaps brought to the town 'on the hoof'. Of particular note was the discovery of 226 copper-alloy coins, the majority dating to the 4th c., though significant numbers of issues were minted in the first half of the 5th c. Since the cobbled area was at least 15 m wide, one explanation for these finds is that the cobbled area was used as an open air market. But these were not the only finds. The cobbles produced a remarkable quantity of metalwork, especially copper-alloy and lead objects, many of which were broken, cut or folded, surely because the objects themselves at the time of deposition no longer served their original function, but were prepared for recycling. Of objects which can be confidently interpreted as scrap, there were 186 finds of lead and 101 of copper-alloy. For the site as whole, this represented 56% by weight and 73.3% by number of all copper alloy finds, even though

[15] Poulter (1995) 67–112.

Fig. 3 A photomosaic of the cobbled roadway, Nicopolis.

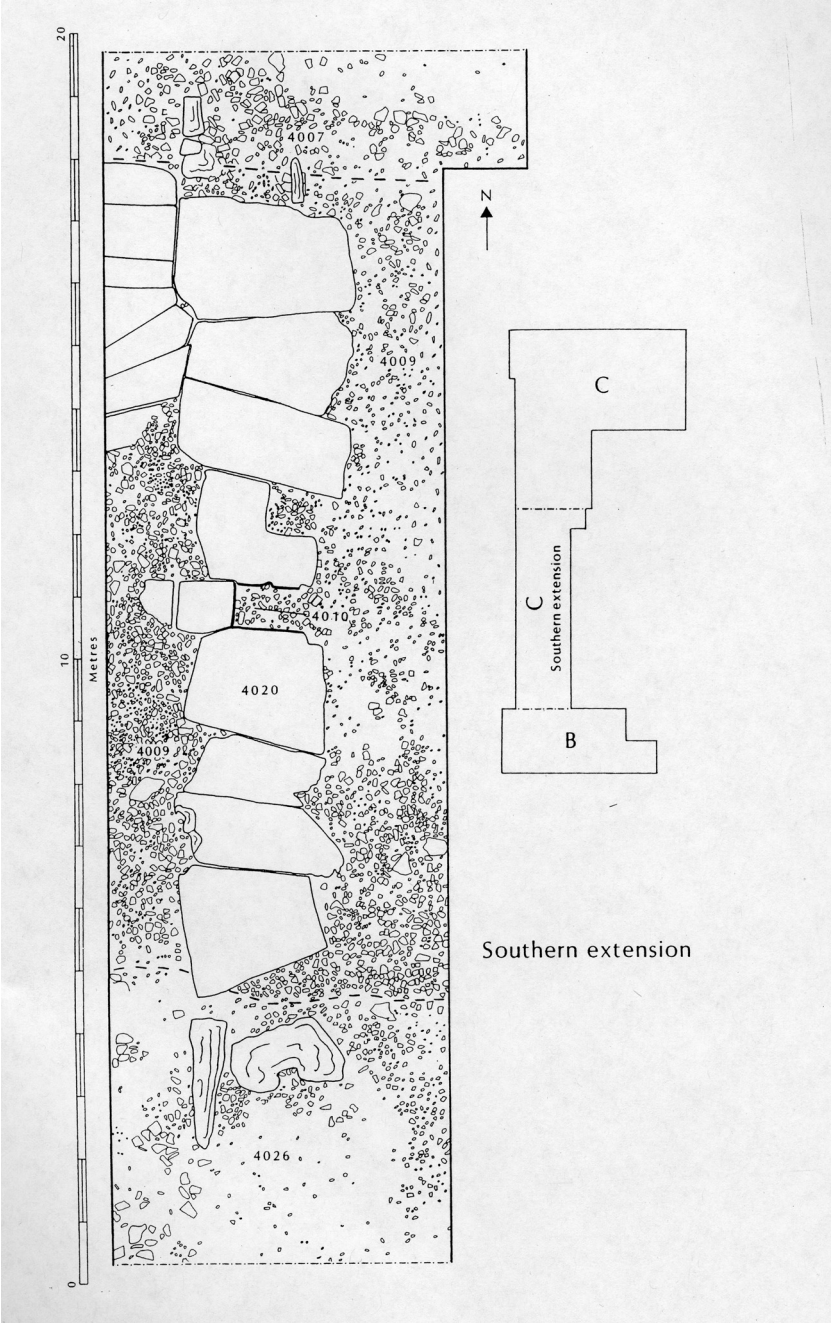

Fig. 4 Plan of the cobbled roadway, Nicopolis.

the size of deposits excavated in this area was notably smaller than other areas. Such a concentration of scrap in this cobbled surface is demonstrably atypical for the site as a whole. It seems that, whatever else the area was used for, metal-working must have been a major industry. It also follows that many of the other metal finds (strap-ends, toilet spoons, metal vessel fragments, fittings, broken brooches etc) may well have arrived in the area—not as rubbish or as chance finds—but because they, too, had been collected for recycling. In other words, the primary function of these objects, whatever that may have been, is of lesser significance for the interpretation of the excavations than their identification as scrap at the time of deposition.

If this was such an important activity in the area, the appearance of so many coins needs to be reconsidered. It has been suggested above that such a high rate of coin-loss indicates the existence of a market where loose change was regularly dropped during commercial transactions. None of the coins had been clipped or folded so none need necessarily have been scrap. Yet, the coins are so small that there would have been no need to do this if they, too, were destined for melting down and being made into new objects. The discovery of so many coins in the same context as scrap waste at least raises the possibility that they, too, no longer served their primary function; if this interpretation is preferred, then the argument that this area served as a market would have to be abandoned. It also raises interesting questions about the perceived value of the coins at the time of deposition and the date when that deposition occurred. Some of the latest coins, dating to the first quarter of the 5th c., were found beneath the lowest of successive thin spreads of cobbles, perhaps because, being the smallest coins, they were more likely to drop between the stones. Alternatively, it could be that, far from representing coin-loss over a century and a half, all the coins may have been discarded (and prepared for recycling?) at a later date, perhaps during the first half of the 5th c. when 4th c. coins, especially coins of the later 4th c., could still be in circulation.

What is reasonably certain is that the reworking of scrap was being carried out on or close to this cobbled area during the Late Roman period. The existence of a market is just one of at least two possible explanations for the large quantity of coins. The date when this activity took place depends not so much on the dates of the coins themselves, but upon whether the coins were, at point of loss, still serving a monetary function, or whether their value was simply as scrap metal. Clearly, in the case of the finds from this cobbled spread, it is the secondary, or

rather final, use to which the finds were put which changes the interpretation of the area's function. The fact that a variety of explanations still remain is no fault of the excavation. Still, the role of the finds in giving rise to new and potentially important information is of considerable interest. Whilst it seems likely we are dealing with finds relating to occupation in these layers, post-excavation analysis in fact reveals a number of other interpretations, with very different implications for our understanding of the site.

Secondary Deposits and Inverted Stratigraphy

Of particular interest is one of the smaller excavations on the western side of the Early Byzantine defences at Nicopolis (fig. 5).[16] Here, the floors and floor make-up within a rectangular tower were examined. Sections of foundation survived and proved that the tower was built as part of the early Byzantine defences over a cultivation soil, itself sealing a destruction layer and *in situ* remains of a Roman colonnade (column base), which dated to the 2nd or early 3rd c. A.D. The lower foundations were trench-built but the upper foundations had been constructed free-standing to a height of 0.80–1.0 m, then the interior backfilled with earth (fig. 6). It was this make-up for the primary, earthen floor of the tower, which proved of singular interest: a deposit of *ca.* 12.25 cubic metres of soil. Although homogeneous in appearance, this material (5018) was produced by tipping successive dumps of soil into the rectangular space between the outer face of the curtain-wall and the inner sides of the tower's upstanding foundations. Large stones concentrated around the outer edges of the deposit where they had rolled down from the top of the successive tips and, although attempts had been made to stamp down the soil close to the curtain wall, especially towards the centre of the tower, there were sods of soil and the material was much less compacted. The top of this dump was domed, probably because the fill had not been carefully levelled before the final make-up for the floor of the tower was laid.

There is no doubt but that this clayey soil represented material barrowed to the site during the construction of the early Byzantine defences in the latter half of the 5th c. A.D. However, it was the finds within

[16] Poulter (1995) 207–18.

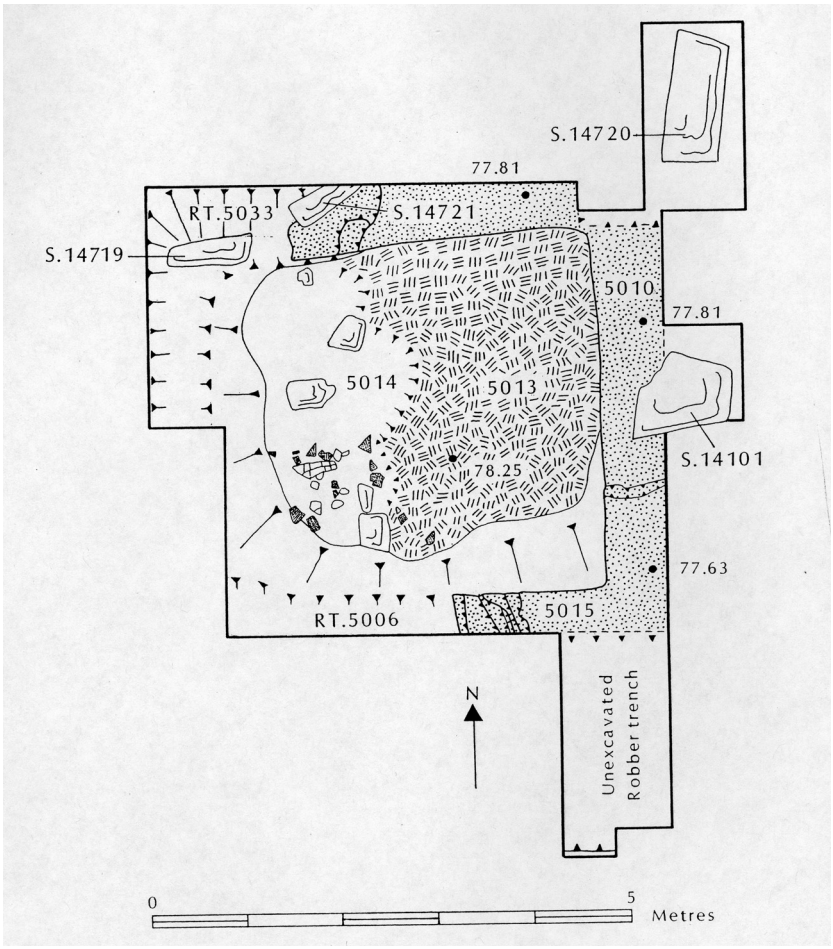

Fig. 5 Plan of the tower, Nicopolis.

this deposit which provided the evidence for interpreting this context, its origins and significance for the history of Nicopolis. There was an unusually large quantity of small finds, including 324 objects; iron and copper-alloy fragments, nails, flint strike-a-lights, beads, worked bone, vessel glass and even fragments of a luxury item: a *diatretum*. Among the finds were scale armour and a sizable of quantity of scrap metal, intended for recycling. There were also 44 copper-alloy coins of 4th and 5th c. date. In these respects, the assemblage resembled that from the cobbled roadway described above. However, there were also significant differences. Curiously, the latest coins were found towards the bottom of

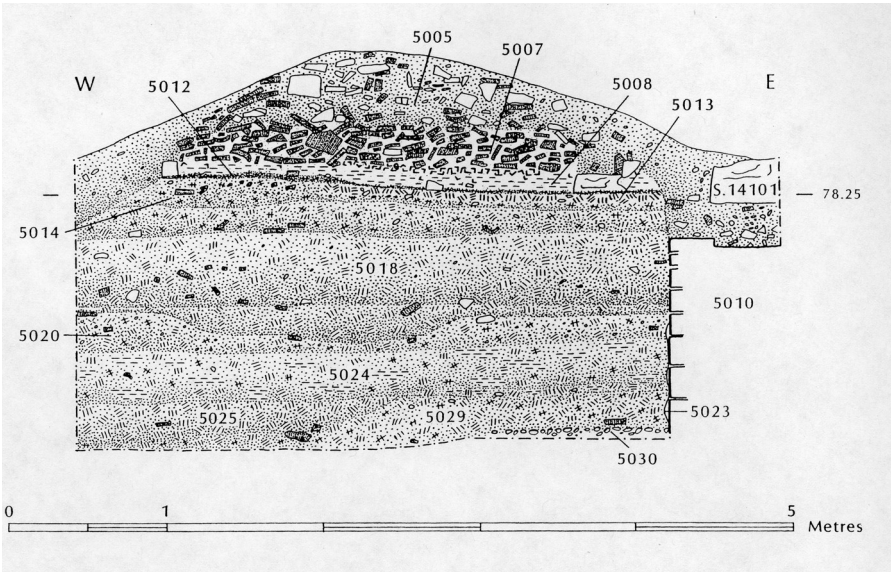

Fig. 6 Section of the tower, Nicopolis.

the dump as if the soil and its finds had been dug from another site and then tipped into the tower—effectively reversing the expected sequence with the latest deposits at the bottom and earlier deposits at the top: a case of 'inverted stratigraphy'. Although the density of finds was as rich as the cobbled spread, the tower deposit produced complete finds of greater intrinsic value (strap-ends, a silver toilet spoon and *ligula*). There were also human bones and, most significantly, pieces of marble wall veneer, plaster, roof-tiles, limestone blocks, architectural fragments and numerous fragments of brick and burnt mudbrick, none of which had appeared in the cobbled surface.

Since it was proved that the Roman town had been destroyed by fire and abandoned towards the middle of the 5th c., it seemed very likely that these successive dumps of soil were all being brought from the destruction layer which covered the remains of the Roman city.[17] This deposit also proved of singular importance for the dating of that destruction. Although the coins from elsewhere on the site, especially those from the cobbled surface, suggested that the Roman city survived

[17] Concerning the evidence for the date of the—almost certainly violent—end to occupation within the Roman city, see Poulter (1995) 33–35.

into the reign of Theodosius II, the coins from the tower deposit included the latest issues and could therefore be accepted as providing a *terminus post quem* for the destruction of Nicopolis. There was a coin of Galla Placidia dated to A.D. 425 at the earliest and a coin of Theodosius II, which can, with probability, be dated to A.D. 435. This suggests that the destruction did not take place in the early 5th c. but later, after *ca.* A.D. 430, when the Hunnic invasions of the 440s provide the most plausible context. The interest of this deposit from this Early Byzantine tower is that, despite being well outside the Roman city, the character of the finds, when seen together, provides a plausible date for the destruction of the Roman city, an event of greater significance than the more obvious conclusion that the Early Byzantine defences themselves were erected later than *ca.* A.D. 430.

Destruction Deposits and the Association of Finds in Context

The Late Roman fortress of Dichin was constructed on the south bank of the river Rositsa, 10 km upstream from the city of Nicopolis. Its walls, gates and towers were well-planned, and built with fine ashlar facing, strengthened by tile-courses. This fortress must have been built by military engineers and was constructed to the highest specifications. What proved more surprising was its date. Although most forts on the Lower Danube belong to the late 3rd/early 4th c., Dichin was not built until *ca.* A.D. 400. It was occupied until it was destroyed by fire, towards the end of the 5th c., and then immediately rebuilt and re-occupied for another hundred years, before it was finally destroyed and abandoned during the last quarter of the 6th c.[18]

Of particular interest are the finds from the first destruction, which, together, provide a valuable insight into the life of the garrison and the manner in which this first period of occupation came to an abrupt end. The finds, and in particular their location, provided direct evidence for the character of the inhabitants: the storerooms contained weapons and two shield-bosses, (presumably attached to wooden shields destroyed in the fire) and prove that a military unit had been in garrison. But other buildings contained numerous agricultural tools, including an iron

[18] Poulter (1999b) 161.

plough-share and cow bells. There were also 25 complete scythes and sickles, all of which appear to indicate that the inhabitants were also engaged in agriculture. However, the location of the scythes and sickles was notably different from the other metal finds. These bladed agricultural implements were not found within buildings but on the roadways and lay within a thick destruction layer of burnt timbers and ash. The store-buildings also contained grain (see Grinter, in this volume), as well as imported amphorae, some of which contained oil, others probably wine. Although the fort was clearly a military establishment, it seems that it held, not a regular garrison, but a mixed community of soldier farmers, presumably *foederati*. Coins, predominantly of the first half of the 5th c. (terminating with issues of Leo), were found in abundance, most concentrating in groups, suggesting that many must have been in purses or hoards which were lost during the fire.[19]

That fire destroyed the buildings, and that the event was sudden and apparently unexpected, is quite clear. However, there were other finds, which indicate that the destruction was probably not accidental. Human bones came from the demolition layer immediately above the destruction level. There was a child's skeleton and some individual bones. But the most graphic evidence was the discovery of what must have been, at the time of demolition, a partly dismembered corpse. Half of a skeleton was found at the bottom of the demolition layer and the other half came from near the top of this same deposit, the two portions being about a metre apart. Now we can be certain that the demolition of the standing remains of buildings occurred within days or at most a couple of months after the destruction. Clearly, however, some days at least had elapsed between the destruction and demolition, which explains why bodies were not buried and body parts became mixed during the general demolition and levelling, preparatory to reoccupation. Close examination of the skeletons demonstrated how bits of bodies had been separated: all of the lower limbs of the skeletons showed clear evidence of gnawing by carnivores, either wolves, or perhaps dogs which had escaped the conflagration but which, for lack of food, had taken to scavenging amongst the corpses of those lying in

[19] This might be taken as good dating evidence, i.e., indicating that the destruction occurred soon after the last dated coins of A.D. 457. But that is not so. Issues of Zeno are very rare on the Lower Danube. Issues of Anastasius are not common and the coin sequence only picks up (during the second period of occupation) under Justin. Accordingly, there is no way of proving when exactly the site was destroyed. It could have been at any date between A.D. 457 and A.D. 520; P. Guest (pers. comm.).

the destruction level. The quantity of finds could be taken to suggest that the fort had been attacked and destroyed, but it is the evidence of the skeletons which proves conclusively that this was no accidental fire. Had the fire been simply an accident, it is reasonable to suppose that anyone who lost their life in the conflagration would have received a Christian burial which clearly was not the case.

But, although this destruction level can be reasonably seen as the result of a successful enemy assault on the fortress, the distribution and quantity of finds other than human bones can still introduce complexity and raise new questions about the character of the settlement at the very moment of its destruction. Quern-stones are common finds on all Roman sites. Even so, no less than 86 were recovered from the fort, the majority from the destruction/demolition levels. This would also seem an excessive number considering that there was only space in the fort for a garrison of probably less than 50 men. As noted above, 25 complete scythes and sickles would seem an excessive overprovision. As noted, they were found in the ash destruction layer within the open alleyways and on the road traversing the centre of the site. They were not found, as might be expected, in houses where they would normally have been stored. It would therefore seem possible that these instruments were in use at the time of the destruction. To peasant farmers, their most valuable and transportable possessions, apart from coins, would have included querns and agricultural tools. Could this abnormally large number of quern stones fit with such a hypothesis? To go further, perhaps the discovery of the scythes and sickles is connected with the attack: is this evidence that local farmers used them as weapons in an attempt to defend themselves during an assault by an enemy? At this point, the argument is moving ahead of the evidence provided by the finds themselves. Nevertheless, quantity and distribution of finds are factors which introduce surprising questions which need to be answered. Nevertheless, by combining those facts that can be established from the excavated stratigraphy with the study of finds, we can substantially improve our chances of coming close to a reasoned, perhaps even correct, explanation.

Conclusion

The interpretation of excavated deposits will always prove a difficult exercise. Despite many uncertainties, the involvement of finds, the study of their distribution and their function (at the moment of deposition)

offer a more reliable basis for reconstructing human activity than limiting the study of artefacts to catalogues where the objects are described only in terms of their primary function. Careful on-site recording and consequent analysis will always produce a series of possible conclusions and it is important to always make explicit the difficulties in proving that one preferred explanation has greater probability than the alternatives. Equally, it is always more than possible that the true explanation for a sequence is one which never occurred to the excavator. This can be illustrated by the later history of Nicopolis. Here, there existed a post-Medieval settlement, which was itself burnt to the ground, and finds, significantly, included complete vessels *in situ*, but also military objects, cannon balls and primitive hand grenades. The destruction of the village could be dated (by coin finds) to the late 18th or early 19th c., a sufficiently brief period in time to suggest that it should be easy to find an explanation in the well-documented history of the region. However, in the period between 1785 and 1812, there were two Russian invasions, crossing the Danube just north of the site. Attacks by bandits on settlements in the region were frequent, there was a local rebellion against the Turks which was savagely suppressed, the local rulers, ostensibly subservient to Selim III, were frequently fighting each other and were themselves attacked by the Sultan after the end of the Turko-Russian war in 1812. The local rulers (*ayans*) themselves evicted villagers and sold their confiscated lands. Any one of these events could explain the destruction of the post-Medieval settlement. It is consequently salutary to note that in a period when we have more historical information the number of possible explanations is so numerous that any attempt to pick out one or other of them is clearly futile.

Sites and their finds in themselves will never provide perfect explanations and can certainly not be linked with one or other of the very few historical events which, by chance, we happen to know about for the later 5th or early 6th c. A.D.[20] But that is not to say that cautious attempts to explain observations made during excavations should not be proposed. Certainly, the linking of finds to their archaeological contexts is a positive approach, which is well-worth applying.

[20] Poulter (1995) 50–51.

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GRAPPLING WITH THE GRANARY: CONTEXT ISSUES AT DICHIN

Pam Grinter

Abstract

This paper summarises the evidence of plant remains discovered in buildings at the Late Roman site at Dichin, Bulgaria, with a focus on the context and location in which they were discovered.

At the outset of the excavations of the Late Roman site at Dichin, Bulgaria, a programme of routine sampling for plant remains was initiated. During the excavation each *sealed* context was sampled for charred plant remains, where the context size permitted**.** Between 40 and 60 litres of soil were taken per sample. Records were made of the details of the context number, context type, location, and position of each sample taken. Over the course of the excavation 567 samples were taken to be processed for charred plant remains, using a flotation tank of the York design, with a mesh size of <500 mm to catch the flot during the flotation process. Of the original 567 samples processed, 37 flots (from the 1997 and 1998 seasons) have so far had the crop component identified and counted. These samples were sorted, and material identified on morphological criteria, under a low power binocular microscope at magnifications of ×10 and ×40, with the help of a modern comparative collection housed at the University of Sheffield and by use of various seed identification manuals.[1]

Flotation of the soil samples regularly produced high volumes of many crop types. These included: peas, (*Pisum sativum*) beans, (*Vicia faba*) lentil, (*Lens culinaris*) millet, (*Panicum miliaceum*) wheat, (*Triticum* sp.) barley, (*Hordeum vulgare*) rye, (*Secale cereale*) and bitter vetch (*Vicia ervilla*). All of these crops were common in the Roman period but their presence at Dichin, along with bones from a range of animal species, reveals a

[1] Anderberg, (1994); Beijerinck, (1947); Berggren, (1969 & 1981); Jacomet, (1987); Jacquat, (1988); Werner *et al* (1988).

L. Lavan, E. Swift, and T. Putzeys (edd.) *Objects in Context, Objects in Use* (Late Antique Archaeology 5 – 2007) (Leiden 2007), pp. 707–710

picture of a wide and varied diet for the occupants of the fortification. No attempt has yet been made to separate different species of wheat, because of similarities in morphology between some examples of spelt and bread wheat (*Triticum spelta or Triticum aestivum*). But the fact that very little chaff (the waste from cereal processing) has yet been found with the grains may mean that the wheat so far identified is bread wheat, as spelt wheat was commonly stored in the spikelet, and therefore the glumes (which tightly grip the grains) would be present along with the grains once charred.

It became clear from the finds and architectural observation that many of the buildings or rooms on the site were used for storing crops. This is especially the case in Area E, which has produced fully processed crops from 5 of the buildings in the area. Some of these had raised floors, the supports for which were made of reused stone blocks or were purpose-built with mud bricks, to aid in the ventilation of the buildings and prevent the spoiling of foodstuffs by mould and rotting. Following the fire, which destroyed the buildings in the 5th c., the area was levelled, preserving the contents of the rooms either *in situ* or immediately below their original location in the void below the raised wooden floor. There appears to have been no later disturbance of the deposit, which lay protected by a layer of mud-brick demolition.[2] Given the sudden destruction of the fortress, and especially the violence associated with it, we can treat these deposits as reflecting primary occupation, though that as experienced at the moment when the fort was sacked. The objects found in many rooms were rich and included vast quantities of pottery together with some metal finds (see A. Poulter this volume) But here I will focus on the significance of the evidence of recovered plant remains, and especially what it tells us about the macro-spatial organisation of the site.

The ecofactual analysis so far undertaken has been limited, and a full picture of the crop storage and use will not be known until a full programme of analysis has taken place. However, one exciting result has been made possible by the stringent and accurate recording methods employed by site staff during excavation. These records have enabled me to plot the position of the stored crops within each building (this kind of information is usually lost during excavation or is not possible to produce because of low numbers of preserved grains). Fig. 1 shows a

[2] Poulter (1999), 174.

plan of Area E with pie charts positioned to represent the stored crops within each building. Building 2 (the largest storage room) contained barley (*Hordeum* sp.), millet (*Panicum miliaceum*), bitter vetch (*Vicia ervilia*), lentil (*Lens culinaris*), grape (*vitis*) and rye (*Secale cereale*). Building 5 contained predominantly wheat (*Triticum* sp.), and the crops were stored at the eastern end of the building, whereas, Building 6 contained barley, millet, lentil and some peas (*Pisum sativum*).

Most of the samples are dominated by one crop type. Where there is contamination this could be due to a number of factors. Mixing may have been caused by the storage method used at the time of the fire, when the building collapsed. Some crops may have been stored in baskets on the floor, whilst others may have been on shelving, suspended on the walls in an elevated position, or even in a mezzanine roof space. If this were the case, when the fire occurred, the subsequent collapse of the building would have caused some mixing of crop types as the containers fell from their elevated position. Alternatively, this pattern of contamination could be the result of storing crops grown as a maslin, that is, a field sown with intentionally mixed cereal species in order to ensure the successful production of at least one of the cereals grown in the field, as discussed by G. Jones.[3] The resulting crop is harvested and stored together.

Further analysis of the spatial distribution of the crops and the mixing evident in some areas may reveal more details of how and by what means the crops were stored. But from the work undertaken so far, some limited conclusions can be reached about the nature of the stores. All of the samples examined to date are fully processed crops. They contain few weed seeds and virtually no crop processing waste at all. Thus it would seem that the crops are in store awaiting distribution or use. There is also the possibility that these seeds may represent stored 'seed corn' ready for future planting. Stored seed corn would be a valuable commodity, as it provides the basis for the subsequent year's planting, and as such may explain its presence within a highly defended area, especially during a period of military stress. During the excavations finds of tools associated with agricultural practices were made, these included scythes, sickles, quern stones and a plough share, all of which formed an essential part of the agricultural year.

[3] Jones and Halstead, (1995) 103–14.

Differences in storage can also clearly be seen between the buildings, which may be explained by a number of possibilities: they may be indicative of ownership, with certain rooms being used by particular farms or families; it may indicate the age of the crop; or it may indicate the order in which the crops were received from the producer. But to complete the analysis of the site, and pose questions on this scale, many more samples from all the areas excavated need to be fully quantified, identified and plotted.

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Fig. 1. Location of stored crops within Area E.